

SEVERE THUNDERSTORM RISK MAGNITUDE INDEX (SToRMi)

Guy Carpenter's Severe Thunderstorm Risk Magnitude Index (SToRMi) provides a transparent approach to severe thunderstorm hazard assessment, providing clients with an independent, current view of risk.

WHAT MAKES SToRMi UNIQUE:



INNOVATIVE AND UP TO DATE

Minimizes Population Bias

Guy Carpenter's team of meteorologists derived SToRMi using a number of climatological datasets and advanced analytical techniques. The result is an industry-leading product that supports carriers in establishing their own view of severe thunderstorm risk.

- **Portfolio Risk Management**
- **Underwriting Support**



HOLISTIC VIEW OF HAZARD

Frequency and Severity

Considering the frequency and severity of severe thunderstorm events, SToRMi offers a holistic view of the underlying hazard landscape and presents data in a straightforward and transparent manner.

- **Independent View from Catastrophe Models**



CAPTURES ALL SUB-PERILS

County Level Data

Given the highly localized nature of thunderstorm activity and significance of each sub-peril as a loss driver, SToRMi accounts for hail, tornado and damaging straight-line wind.

Each sub-peril is assessed independently from the others before being aggregated into a combined index.

- **Easily Accessible Technology**

Severe Thunderstorm Risk Magnitude Index (SToRMI): Highlights



Historically Based Insights

SToRMI was developed with expansive climatological data and academic research. These components create a reliable, accurate representation of observed weather activity.



Supplementary Indices

By incorporating all three severe thunderstorm sub-perils into SToRMI's framework, Guy Carpenter can isolate each sub-peril to devise an additional risk score. In addition to SToRMI, carriers can assess risk through the Hail, Tornado, and Wind Indices.



Easy to Understand

SToRMI is classified into eight different risk categories, ranging from Negligible (lowest risk) to Extreme (highest risk). These risk classifications are assigned using a percentile binning system that separates risk classes appropriately.



Regular Updates

SToRMI optimizes Guy Carpenter's OmniCAT Risk Score framework for frequent reliable updates. Biannual product updates supplement the most recent storm data available within a two-year period. Consequently, SToRMI remains a constantly evolving tool that retains its value.



Easily Accessible through any GC Product Suite

By logging in to GC AdvantagePoint®, GC Mosaic® or GC Edge, clients can conveniently access SToRMI in a spatial format. In these platforms, users can overlay a portfolio, filter data dynamically and conduct in-depth analyses.



Climate Change Projections

Guy Carpenter partnered with Northern Illinois University researchers to enhance SToRMI by incorporating long-term trends in hail and tornado activity. This data will expand SToRMI's product offering with two forward-looking views. SToRMI 2030 and SToRMI 2040 offer insights to carrier around long-term observable risk trends.



API Compatibility

Through Guy Carpenter's suite of RESTful API services, data can be directly integrated at the point of sale, as well as into hazard scores and accumulation metrics.



Contact

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