

# Verisk Crop Hail Model for the United States



## Release Information

Release Date	<ul style="list-style-type: none"><li>June 2022</li></ul>
Software Systems	<ul style="list-style-type: none"><li>Touchstone Re 2022</li></ul>

## Model Details

Domain	<ul style="list-style-type: none"><li>42 states (the contiguous United States excluding the six New England states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)</li></ul>
Peril(s)	<ul style="list-style-type: none"><li>Hail</li><li>Convective straight-line winds</li></ul>
Explicitly Modeled Crops	<ul style="list-style-type: none"><li>Barley</li><li>Corn</li><li>Cotton</li><li>Rice</li><li>Soybeans</li><li>Durum, Spring and Winter Wheat</li></ul>
Model Resolution	<ul style="list-style-type: none"><li>8-km</li></ul>
Intensity Parameter(s)	<ul style="list-style-type: none"><li>Hail – Hail total kinetic energy (<math>\text{J/m}^2</math>)</li><li>Convective straight-line wind – Average maximum wind speed (3-sec gust; mph)</li></ul>
Geospatial Layers	<ul style="list-style-type: none"><li>None</li></ul>

## Stochastic Catalog

Catalog	<ul style="list-style-type: none"><li>10,000-year all-events catalog</li></ul>
Event IDs	<ul style="list-style-type: none"><li>All event IDs are new</li></ul>

## Event Sets

Historical Event Set	N/A
World Scenarios Event Set	N/A

## Touchstone Re

Industry exposure loss files	County and State
Input	County and State
Output (losses)	County and State

### Touchstone Re Lines of Business

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Crop hail</li><li>• Production plan</li></ul> | <ul style="list-style-type: none"><li>• Crop hail for the model domain</li><li>• Production plan for Colorado, Iowa, Idaho, Illinois, Indiana, Kansas, Minnesota, Missouri, North Dakota, Nebraska, Ohio, South Dakota, Texas and Wisconsin</li></ul> |
|---|---|

### Industry Exposure Database

- Vintage
  - Crop Data Layers – 2017-2020
  - Premium Rates – 2020
  - Policy Conditions – 2020
- Resolution
  - County, State (the underlying Industry Exposure Database resolution is 8 km)