RMS North America Wildfire HD Models

Advanced High-Definition Modeling Methodology for Capturing the Scope of Wildfire Risk

KEY FEATURES AND BENEFITS

- Probabilistic wildfire HD model for the entirety of the contiguous United States and Canada
- Realistic fire footprints that account for simulations of surface fuels, topography, weather conditions, moisture, suppression, and spotting
- Explicit ember and smoke simulations to detail impacts beyond the fire perimeters
- Capture mitigation and suppression measures developed with leading experts in wildfire risk
- Wildfire Hazard Data and Risk Score Data products to enhance workflows at the point of underwriting
- Through the HD framework, accurately represent reinsurance terms such as the hours clause and spatial components of wildfire reinsurance occurrences

Enhanced Understanding of North American Wildfire Risk

The devastating Northern California Wine Country, Fort McMurray, and Chimney Tops fires have demonstrated the scale of wildfire risk across North America. To date, traditional hazard quantification and deterministic scoring tools have not provided enough information to properly capture the risk of major fires impacting dense suburban areas. By delivering probabilistic modeling that promotes an understanding of how wildfires become major catastrophes, RMS® is providing new opportunities to underwrite individual locations more appropriately and effectively manage both regional and continental portfolios.

A Comprehensive Solution

The RMS North America Wildfire HD Models simulate wildfire activity across the contiguous United States and Canada. Capturing the full impact of wildfires at high resolution, including the explicit contribution of embers and smoke, the models allow users to understand the realistic behavior of wildfires and effectively price locations in and around the high-risk wildland-urban interface (WUI). In addition, with a full complement of secondary characteristics and geohazard data available – such as roof covering, wall cladding, nearby fuel, and mitigation details – users can underwrite more effectively and deliver new types of policies, such as smoke sublimits.

The contribution of embers – seen as a major driver of increased risk in the recent Wine Country fires – is explicitly simulated within the RMS North America Wildfire HD Models. This simulation goes beyond traditional fuel-based fire techniques and captures the extent that a fire can loft large accumulations of fire brands beyond the fire perimeter, carrying the risk to dense residential and commercial areas. With the RMS North America Wildfire HD Models, areas that have not been previously considered as threatened by wildfire can now have their risk appropriately quantified.

RMS

RMS is the world's leading catastrophe risk modeling company. From earthquakes, hurricanes, and flood to terrorism, agriculture, and infectious diseases, RMS helps financial institutions and public agencies understand, quantify, and manage risk.

WILDFIRE ON THE RISE

SINCE 2014 APPROXIMATELY $US 18B in North America wildfire cat event losses

5 OF THE TOP **10** most destructive wildfires in California have occurred **2014 BETWEEN 2017**

In the U.S. alone, over **10 MILLION ACRES BURNED** IN **2017**

Fully Probabilistic Wildfire Modeling Capabilities

The North America Wildfire HD Models offer new growth opportunities by quantifying the location and severity of wildfire risk beyond simple fuel and wildland-urban interface (WUI) techniques. This enables users to better understand the probabilistic risk of burn and smoke damage, along with the impacts of mitigation measures to intelligently price individual locations and entire portfolios.

In addition, by leveraging the HD model framework, users can capture both the temporal and spatial elements of reinsurance terms related to wildfire, such as a 7-day hours clause and 150-mile radius. Now, aspects of return period loss metrics or impacts of mitigation measures can be understood.

Modeling on the RMS(one) Platform

With the industry now more competitive than ever, businesses need innovative catastrophe models coupled with efficient workflows and advanced analytics to get beneath the top-level results and inform underwriting and risk transfer decisions.

Risk Modeler leverages the RMS(one) platform to deliver a future of smarter modeling and more informed decision-making, with more advanced models and features than those available to catastrophe modelers on any other solution.

Find Out More

Ask your RMS sales or customer services representative for more information on the RMS North America Wildfire HD Models. Call +1.510.505.2500, +44.20.7444.7600, or email **sales@rms.com**.