Cat Risk Management 2024: It Starts With The Science

February 26-29, 2024 | Orlando, FL

The RAA's 2024 Cat Risk Management Conference will focus on the role of science and technology in best understanding various natural hazards. As secondary perils no longer deserve to be "second class (cat) citizens", it is imperative that the industry understands the evolving science and research to support not just these perils, but all cat perils. Multiple sessions will address vulnerability, both the challenges of collecting credible loss data, as well as utilizing research to better inform vulnerability. The program includes numerous breakout sessions examining hazard, vulnerability, AI and regulatory topics.

Sessions include:

Who Develops Hazard Data? What is the Governments Role?; Understanding the Complicated Science of Severe Convective Storms; Updates to the USGS Earthquake Hazard Models; Fundamentals of Climate Science, Don't Blame the Models; Hurricane - El Nino; Fundamentals of Underwriting Wildfire; The Cat is Out of the (Geographic) Bag; Wildfire; Severe Convective Storm Fundamentals; Why are Cat Losses Increasing? Is Climate the Sole Driver of the Increase in Losses?; Urban Conflagration; Financial Fundamentals; Modeling a Complete View of Risk; Considerations for a National Flood Insurance Program in Canada; How will generative AI change reinsurance scenario analysis?; "Catastrophes in the Media"; Framing the Scale of Loss; "It Starts with the Roof": How IBHS and the Insurance Industry are Working Together to make a Difference; Will buildings perform as expected after long absence of a major US earthquake?; Assessing Climate Risks in Insurance: NAIC's Survey and Regulatory Lens; Developing an Open Exposure Model; The Difficulty of Separating Wind Damage from Water Damage; How do Regulatory and Rating Agencies Handle Catastrophe Risk; Conflagration in Communities: What Affects It and What Are The Vulnerabilities?; Modeling Strike, Riot and Civil Commotion (SRCC); How to Read a Balance Sheet and Income Statement for an Insurance Company, and the Impact and Reserving of Cats on the Financial Result; Is Straight Line Wind (Derechos) Represented Correctly in the SCS Models?; Bank of England's View of Non-natural Catastrophes; Exposure Management vs. Cat Risk Management – are They Different or is One a Subset of the Other?; The Future of Wine - Should we be Whining?; Connecting Climate Science with Cat Risk Management; "Bringing it All Together: How Market Issues Affect Market Stability"; Adapting Models to Specific Needs; and much more.

This promises to be an exciting, engaging Conference and the RAA looks forward to seeing everyone in Orlando.

Who Should Attend

- Professionals – including insurers, reinsurers, and investment banks – who are responsible for risk management functions related to catastrophe risk
- Catastrophe Modeling Professionals
- Academics
- Federal/state government professionals
- Regulators/staff

Reinsurance Association of America
Reinsurance Education Institute

2024 CAT MODELING SPONSORS:

Arch Re · CAPE ANALYTICS · CHUBB · CoreLogic · CyberCube · EigenRisk · Gallagher Re · GUIDEWIRE · IMPACT FORECASTING Powered by Aon · insurity · InsurWave · KatRisk · KC &CO · MarshMcLennan · MAXIMUM INFORMATION · MOODY'S RMS · Munich RE · nearmap · precisely · RenaissanceRe · smarty · Verisk · zesty AI

CAT RISK MANAGEMENT 2024 WORKING AGENDA

Agenda as of 1/21/2024. The 2024 Cat Risk program continues to develop -- see the event schedule online for the latest agenda and expanded session descriptions.

MONDAY, FEBRUARY 26, 2024

3:00 p.m. **Cat Risk Management Registration Opens**

3:30 p.m. **Welcome Reception Hosted by CoreLogic**

TUESDAY, FEBRUARY 27, 2024

7:00 a.m. **Breakfast / Cat Risk Management Registration**

8:15 a.m. **Welcome and Introduction**

Lee Covington, President, Reinsurance Association of America

Frank Nutter, Past President, Reinsurance Association of America

Dan Dick, CCRMP, Executive Managing Director, Global Head of Property Analytics, Aon

8:45 a.m. **Who Develops Hazard Data? What is the Governments Role?**

Rick Spinrad, Under Secretary of Commerce for Oceans and Atmosphere & NOAA Administrator

9:45 a.m. **Networking Break**

10:15 a.m. **Understanding the Complicated Science of Severe Convective Storms**

Walker Ashley, Professor Northern Illinois University

The impacts of severe convective storms (SCSs) are on the rise with increases in annual rates of losses exceeding most other perils, which is leading to more attention by the re/insurance community as the high-frequency peril changes its character. And with this change comes questions: What is driving the trend of SCS loss volatility, why is it catching us off guard, and what can we expect in the future? This presentation will dive into the challenges of modeling SCSs, what observations and recent climate simulations reveal about the changing SCS risk landscape, and what we can expect from SCSs in the future. The importance of rapidly evolving human-built environment exposure and how this disaster constituent commingles with changes in SCS risk to drive impacts will also be illustrated.

11:15 a.m. **David Maurstad, Assistant Administrator for the Federal Insurance Directorate (and Senior Executive of NFIP)**

12:00 p.m. **Lunch**

1:30 p.m. **Breakout Sessions**

Session I – Updates to the USGS Earthquake Hazard Models

Edward (Ned) Field, USGS

This session will provide a brief overview of improvements made in the latest 2023 USGS National Seismic Hazard Model (NSHM) then pivot to discussing a number of current challenges and future priorities with respect to further model improvements, with particular emphasis on risk analyses. These include the representation of epistemic uncertainties, multi-fault ruptures, spatiotemporal earthquake triggering, non-ergodic ground-motion models, and the need for risk metric calculations during the model-building process. We will also discuss how the risk modeling community can engage with, and contribute to, the model building process.

Session II – Fundamentals of Climate Science

Rachel Horvath, Catastrophe Analyst II, Everest Group

The earth's climate is changing rapidly, and reinsurers need to understand these changes in order to effectively manage catastrophe risk. This session examines the science behind climate change, and how it translates to changes in catastrophe perils.

Session III – Weathering the Storm: Introducing Next-Generation Hail Risk Analytics

Kevin Van Leer, Vice President of Client Success, Cape Analytics

Learn how new technologies, including forensic weather analytics, storm modeling, and geospatial insights, are transforming the understanding of hail risk at the property level. This session will share new insights and statistics into damage caused by 2023 severe convective storms, the promise and limits of imagery-based solutions, new forms of forensic hail impact information, and the critical component of prior hail experience at the property level and its impact on roof vulnerability in particular.

Session IV – Don't Blame the Models

David Keeton, Chief Modeling and Pricing Officer, Avoca Risk Underwriting Solutions

Hazards have a range of inherent uncertainty long before any model comes into play. The models do not create that uncertainty but attempt to emulate the latest scientific consensus around the range of possible outcomes.

Session V – Modeling Wildfire and Severe Convective Storm: What You Need to Know

Jamie Knippen, Senior Product Manager, CoreLogic
Tal Paschal, Senior Manager, CoreLogic

An overview of CoreLogic's latest developments and best practices in wildfire and severe convective storm catastrophe modeling, looking at the challenges and opportunities of modeling these complex perils, such as data availability and quality, hazard and vulnerability assessment, uncertainty quantification, and model validation. From risk management to underwriting, pricing, and capital allocation, join us for what you need to know for making smart business decisions and implications for choosing the wrong model.

2:00 p.m. **Session Change Break**

(continued)

TUESDAY, February 27, 2024 continued

2:15 p.m. Breakout Sessions

Session I – Hurricane - El Nino

Mark Bove, Natural Catastrophe Solutions Manager, Munich Re U.S.

El Nino-Related Wind Shear and Record High SSTs – Why the 2023 Hurricane Season unfolded the way it did. [Idalia, 1992 similar, are there signals?] The 2023 Atlantic hurricane season was a clash between El Niño and off the chart warm sea surface temperature (SST). This session focuses on the key ingredients in hurricane formation. Why did the 2023 hurricane season unfold the way it did? The conflict between El Niño and extreme Atlantic Ocean heat, a new phenomenon or it has played out in the past. Just as importantly, how changes in large-scale atmospheric circulation influence the weather around the world?

Session II – Fundamentals of Underwriting Wildfire

Hope DeBarthe, Senior Vice President, Gallagher Re
Christopher Nicolai, Executive Vice President, Gallagher Re

Is it possible to profitably write high hazard wildfire risks? Insurance companies are faced with the challenge of balancing regulatory requirements, policyholder satisfaction, portfolio management, reinsurance protection, and ultimately their own profitability when choosing which wildfire exposed risks they select. How can underwriters most effectively employ the options available to them such as hazard scores, stochastic models, accumulation metrics, overall cat costs, and loss mitigation measures?

Session III – Predict, Prevent & Manage Catastrophe Loss with AI-Powered Predictive Analytics

Kevin Tulp, Senior Solution Engineer, Nearmap

Carriers & Reinsurers carriers and reinsurers are turning to predictive analytics to predict and prevent losses, maintain profitability in hazard-prone regions and expand protection of homes, businesses and communities in the event of a catastrophe. In this session we will explore the specific tools carriers are using to more rapidly and confidently respond before, during, and after a catastrophic event, including: tracking ongoing events to identify vulnerable properties to strategically allocate resources; more accurately predicting exposure, anticipating claims, and preparing reserves; and alerting policyholders of CAT risk and jumpstarting the claims process immediately following impact prior to first notice of loss.

Session IV – The Cat is Out of the (Geographic) Bag

Jason Trock, Managing Director, Guy Carpenter

United States losses from a Canadian wildfire? California hurricanes? Maui wildfires? Certain catastrophic perils are no longer constrained to traditional geographies. This session will explore if these non-traditional events are here to stay and what other unknowns may be on the horizon. It will also cover how risk managers account for these unexpected and non-traditional events.

Session V – Advancing the Field: A New Era of Sophistication in Cyber Risk Modeling

Damini Mago, Senior Product Manager, Cyber, Moody's RMS

Delve into the evolution and current sophistication of cyber risk modeling in a comprehensive presentation that highlights how cyber catastrophe models have transformed from their initial stages to advanced systems reshaping the industry. The session will highlight the increased sophistication of the Moody's RMS cyber model, focusing on how advanced analytics and the latest data foster a more accurate and robust comprehension of cyber threats to make business decisions.

2:45 p.m. Networking Break

3:15 p.m. Breakout Sessions

Session I – Wildfire

Shinjini Menon, Vice President and Asset Management and Wildfire Safety, Southern California Edison

How is our understanding of wildfire hazard changing and how might these changes impact our tool kit which includes stochastic & scoring models? The recent fires on Maui only serve as a reminder that, due to increasing variability in weather cycles, historic experience is not sufficient to anticipate future events. As we witness the latest emerging cycle of EL Nino / La Nina, we can expect large regions around the globe will experience increased dry spells. In addition, the known phenomena of 'Flash droughts can also increase the risk of wildfire in smaller / localized regions. How do these known climate characteristics impact the frequency, severity and geographic range of wildfire hazard? What are the other key drivers behind this hazard? What options are available to facilitate decision making as our models evolve to reflect the latest understanding of this hazard? This session will try to touch upon answers to these questions.

Session II – Severe Convective Storm Fundamentals

Dan Zitelli, Senior Vice President & Co-Head of Catastrophe Analytics, Holborn Corporation

SCS is now a major modeled driver of loss. How are SCS models adapting beyond tornado and hail to include sub-hazards such as straight-line winds, derechos, pineapple express? What is the linkage to droughts and other climate phenomena? Why is it spreading all over and no longer just in tornado alley?

Session III – Future-Proofing Business: Integrating Wildfire Risk, Urban Conflagration, and Climate into Business Decisions

Daniel Tatro, Insurance Solution Architect, Precisely
Chris White, Product Management Director of Wildfire Risk, Precisely

(continued)

TUESDAY, FEBRUARY 27, 2024 continued

Climate change plays a crucial role in amping up the frequency and severity of wildfires. It not only heightens the risks linked with wildfires but also broadens their impact, demanding our urgent attention. While urban conflagrations were once rare, recent trends indicate a worrying uptick in their frequency. Managing such events requires a comprehensive approach, encompassing risk assessment, mitigation, and management. For the insurance industry, these changes present both challenges and opportunities. In our discussion, we aim to break down the complexities at play, providing insights into how the insurance sector can improve its ability to grasp, measure, and effectively tackle the heightened risks of intense wildfires and methodologies to mitigate losses from urban conflagrations.

Session IV – Why are Cat Losses Increasing? Is Climate the Sole Driver of the Increase in Losses?

Paul Eaton, Director, Aon

What other elements are contributing to the increase seem over the past few years.

Session V – Hail Hath No Fury Like a House Divided

Dr. Eric Robinson, Director and Global Head of SCS Development, Impact Forecasting
Andres Paleo, Associate Director, Research and Development, Impact Forecasting

Using severe hail as an example, this session explores how dividing a structure into discrete components, each with their own loading, resistance, and value, can provide insight and flexibility into managing property risk by highlighting how certain features impact the probability, severity, and ultimately cost, of this damaging peril.

3:45 p.m. Session Change Break

4:00 p.m Breakout Sessions

Session I – Urban Conflagration

Negar Elhami-Khorasani, Associate Professor, State University of New York at Buffalo

This presentation discusses a streamlined model to capture fire spread inside wildland-urban interface communities to quantify structural damage. Three case studies, the 2018 Camp Fire, the 2021 Marshal Fire, and the 2023 Lahaina Fire are modeled to study the community damage. The application of the model to establish mitigation guidelines and to inform preparedness and response strategies will be discussed.

Session II – Financial Fundamentals

James Rehbit, Senior Vice President, Catastrophe Modeling Manager, Munich Re

The losses generated by catastrophe models are not the final answer. Whether using the models for risk management or post event loss estimation, there are a number of additional elements that will impact your result. This session will provide strategies for incorporating various non-modeled components into your loss estimates

Session III – Maximum Information

Session IV – Modeling a Complete View of Risk

Oleg Kerman, Head of Cat Modeling Americas, TransRe

What is included in the catastrophe model and what are the elements that need to be added to get a complete view of risk for pricing, underwriting and risk management.

Session V – Managing Wildfire Risk in an Evolving Landscape

Julia Borman, PhD, Director, Verisk

Managing risk from wildfire peril has grown rapidly as a priority for insurers and has seen an increased focus from regulators. This session will explore the update to the Verisk Wildfire Model for the U.S. and the evolving dynamics between regulators and catastrophe models.

4:30 p.m. Session Change Break

4:45 p.m. Breakout Sessions

Session I – Considerations for a National Flood Insurance Program in Canada

Mathieu Boudreault, University of Quebec at Montreal

Floods are among the most frequent and costly natural disasters in Canada. However, flood insurance is optional in the country and not available to those most at risk of flooding. This has led the Federal government to review the financial management of flooding in Canada. In this presentation, we discuss the current state of flood-related financial risk-sharing in Canada, the distribution of modelled flood losses across the country, and the costing and funding of various hypothetical flood insurance plans. We conclude with policy implications and a potential roadmap towards flood resilience in Canada.

Session II – Strategies for Location Intelligence In the Cloud

Berk Charlton, the Chief Product Officer, Smarty

Smarty is a leader in geocoding and address-based data enrichment. Learn about cloud strategies to increase geocoding and data enrichment accuracy, improve performance and lower costs.

Session III – How Will Generative AI Change Reinsurance Scenario Analysis?

Cameron Rye, Head of Modeling Research and Innovation, Willis Towers Watson Research Network at Willis Towers Watson

Originating from Hermann Kahn's work at Rand to deter thermonuclear war post-WWII, scenario analysis has matured into an essential business tool, notably within

(continued)

WEDNESDAY, MARCH 1, 2023 (continued)

the reinsurance industry where it is used to strategically manage tail risk. However, crafting multiple scenarios can be resource-intensive for businesses, and while it can be fairly easy to come up with a list of scenarios, it is not always easy to get the details right. This challenge could be overcome by Generative AI, which is emerging as a transformative force, poised to rejuvenate the static field of scenario science. In my talk, I will demonstrate how Large Language Models, like ChatGPT, possess the remarkable ability to generate downward counterfactual scenarios for US hurricanes, enabling reinsurers to identify and prepare for potential risks—such as the levee failures witnessed during Katrina —prior to their occurrence.

Session IV – Catalyzing Action in Vulnerable Communities: An On-the-Ground Perspective on Closing the Protection Gap

Veronica Cedillos, President & Chief Executive Officer, GeoHazards International

GeoHazards International (GHI)—a small, globally-focused non-profit organization founded in 1991—focuses on empowering vulnerable communities worldwide to build resilience ahead of disasters and climate impacts. This presentation will emphasize our on-the-ground perspectives in low-resource communities, highlight how scenarios and risk models can better motivate action, and share how the insurance industry can make a difference.

Session V – Karen Clark and Company

5:15 p.m. **Reception sponsored by Karen Clark and Company**
7:00 p.m. *Citrus Piazza*

WEDNESDAY,FEBRUARY 28, 2024

7:00 a.m. **Breakfast**

8:15 a.m. **International Society of Catastrophe Managers Update**

Jon Ward, President, International Society of Catastrophe Managers

8:30 a.m. **Communicating with the Public About Preparing for and Recovering from Catastrophes**

Dr. Rick Knabb, On-camera Meteorologist, The Weather Channel Former Director, National Hurricane Center

How can all of us who work in weather, insurance, and the media collaborate to enhance our communication with the public, so that more people are adequately prepared, insured, and resilient in the face of all hazards? Convincing people to take tangible steps such as meeting with their agent for an annual insurance checkup, getting both conventional and separate flood insurance, and making affordable improvements to strengthen their homes - all to ideally lower premiums and claims in the process - are among important goals that require more proactive strategies to achieve. Adding to these existing challenges, how is our changing climate affecting weather hazards, in particular those associated with tropical cyclones and flooding, in ways that can inform and motivate all of us to adjust to be even more resilient?

9:30 a.m. **Networking Break**

10:00 a.m. **Framing the Scale of Loss**

Julie A. Serakos, CCRMP, Managing Director – Head of Model Product Management, Moody's RMS
Tom Larsen, Senior Director of Insurance Solutions, CoreLogic
Jayanta Guin, PhD, EVP & CRO, Extreme Event Solutions, Verisk
Michal Lorinc, Head of Catastrophe Insight, Impact Forecasting
Catastrophe models are used for many purposes, both inside and outside of the insurance industry. This session dives into how model vendors help the industry understand the scale of potential loss, both from an average annual loss standpoint and of severity (1 in 100 year) perspective. What does a 100-year global insured loss look like and where could a loss of this magnitude occur? How do insurers take this information and shape their own view of risk?

11:00 a.m. **"It Starts with the Roof": How IBHS and the Insurance Industry are Working Together to Make a Difference**

Roy Wright, President and CEO, IBHS
Eric Nelson, Senior Vice President of Enterprise Catastrophe Strategy & Analysis, Travelers
Craig Tillman, President, Renaissance Re Risk Sciences Inc.

12:00 p.m. **Lunch**

1:30 p.m. **Breakout Sessions**

Session I – Will buildings perform as expected after long absence of a major US earthquake?

Adam Hatzikyriakou, Research Analyst, TransRe

Nearly 80 million Americans live in areas prone to destructive ground shaking, half of which live in California alone. A prolonged gap in California's seismic activity suggests it is at risk of a major earthquake that could have widespread impact to both life and property. Several factors can contribute significantly to earthquake losses including the widespread growth in exposure, the large contribution of non-structural losses, and existing vulnerabilities in an aging building stock. The importance of these loss drivers were highlighted in recent events such as the 2023 Turkey and Morocco earthquakes. Several actions can be taken to better understand and mitigate earthquake risk. These include uncovering weaknesses through extreme scenario modeling, retrofitting known vulnerabilities in the building stock, and managing losses through insurance mechanisms.

(continued)

WEDNESDAY, FEBRUARY 28, 2024 (continued)

Session II – Cyber modeling considerations

Scott Stransky, Managing Director and Head of the Marsh McLennan Cyber Risk Intelligence

Cyber models can provide a valuable tool for understanding, quantifying, and managing cyber risks. They enable (re)insurers to make data-driven decisions, help to enhance insureds' cybersecurity posture, and empower organizations to effectively respond to the evolving threat landscape. No cyber models are one-size-fits-all, nor are they created equally, however. They should align with an organization's specific requirements and existing cyber risk management capabilities. Join us to learn what key factors your organization should consider when evaluating cyber risk models or developing their own. Key takeaways of our discussion will include: the pros and cons of building a cyber model vs. licensing a third-party model, the data and steps needed to properly build or validate a cyber model, questions to ask cyber modeling vendors, and more!

Session III – Assessing Climate Risks in Insurance: NAIC's Survey and Regulatory Lens

Shaveta Gupta, NAIC

This session dives into the analysis of the NAIC's climate disclosure survey. 27 states/territories are now requiring all licensed insurers in their jurisdiction to report this information annually. Discussion is geared towards Property and Casualty (P&C) insurers' responses related to modeling and scenario analysis to assess and manage physical risks in the face of escalating climate challenges

Session IV – Developing an Open Exposure Model

Mark Cravens, CCRMP, Independent Consultant, The Institutes, Risk and Insurance Knowledge Group

As use of catastrophe modeling expands beyond the (re)insurance industry, there are clear needs for an open exposure model (OXM) describing US exposures usable by multiple constituencies including non-insurance risk managers, regulators, response planners, and academia. This session will describe those emerging needs and what it will take to develop a viable and transparent OXM.

Session V – Building Robust Catastrophe Models in the Face of Climate Trends

Suz Tolwinski-Ward, PhD, AVP & Director of Climate Statistics, Verisk

While there are many challenges to building a robust catastrophe risk model, solving for apparent trends in calibration data sources has taken center stage. Determining whether such trends reflect real changes in the world or are artifacts of inhomogeneities in the data over space and time requires significant statistical analysis coupled with significant domain area expertise. This talk will focus on methods used by Verisk's extreme event solutions team to wrangle trends in hazard observations to build trustworthy models of atmospheric perils in the face of a changing climate

2:00 p.m. Session Change Break

2:15 p.m. Breakout Sessions

Session I – The Difficulty of Separating Wind Damage from Water Damage

Dan Anstedt, Vice President, Head of Claims, Property Division, Core Specialty

In the aftermath of hurricanes, determining whether property damage resulted from forces of wind, water, or a combination of both perils is paramount to policyholder indemnification in accordance with the terms and conditions of the policy. Understanding characteristics and timing of the peril(s) involved, and leveraging appropriate experts will help to conquer causation confusion.

Session II – Don't Risk It: Successfully Underwriting Severe Convective Storms Using AI

Stephanie Kuczynski, Risk Analytics, ZestyAI

There are two tools in the toolbox for severe convective storms: stochastic models and AI-based climate risk models. In this session, we will reveal how insurers are using both tools to create a complete picture of risk from the portfolio to the individual property.

Session III – How do Regulators Evaluate Catastrophe Risk

Tom Botsko, Ohio Dept. of Insurance, Chief Actuary
Wanchin Chou, Connecticut Dept. of Insurance, Chief Actuary

How do regulators incorporate catastrophe risk into their solvency review and incorporate catastrophe risk into their review of rating and underwriting? What views of risk and perils are considered and where do we stand on incorporating wildfire risk, specifically? How has this perspective changed over the past few years and what are some expected changes or considerations down the road regarding severe convective storms and flood perils?

Session IV – How to Train Your Lawyer; Identifying Where Cat Models and Reinsurance Contracts Diverge

Wendy Hayes, Head of Catastrophe Risk Analytics, Cincinnati Re
Claudio Ronzitti, Head of Claims and Legal, Cincinnati Re

Cat models cannot always accurately reflect what is in a reinsurance contract (e.g., event duration, perils covered, definition of risk). What are the common pitfalls and how to communicate them.

Session V – Karen Clark and Company

(continued)

WEDNESDAY, FEBRUARY 28, 2024 (continued)

2:45 p.m. Networking Break

3:15 p.m. Breakout Sessions

Session I – Conflagration in Communities: What Affects It and What Are The Vulnerabilities?

Faraz Hedayati, IBHS

Buildings can face various ignition sources during a wildfire by flames and embers. The impact of wildfires on communities amplifies significantly when fire spreads rapidly from one building to another due to elevated wind speeds in dense neighborhoods. In this presentation, the vulnerabilities of various building components to wind driven fires, as influenced by the distance between the shed and main building and their relative angle, will be discussed.

Session II – Expanding Peril Model Coverage

Mr. Brandon Katz, Vice President, KatRisk LLC

KatRisk has been working on the development of additional perils beyond inland flood, storm surge, and tropical cyclone wind. New perils include wildfire and severe convective storm (hail, tornado, straight-line wind). We will present some of the unique issues associated with modeling these perils as well as delivery options for the data and models, including APIs to support underwriting. Also discussed will be initiatives to include third party models, such as earthquake, on the SpatialKat analysis platform.

Session III – Modeling Strike, Riot and Civil Commotion (SRCC)

Stephen Hudson, Political Violence Advisory Lead, Senior Vice President, Guy Carpenter

In recent years major incidents of strikes, riots and civil commotion (SRCC) have resulted in significant insured losses and brought this often overlooked peril into the spotlight. In the last 24 months we, at Guy Carpenter, have seen increasing demand to understand, analyse and advise clients on the risk of SRCC to their portfolios. Within Guy Carpenter's Political Violence Advisory Team we have worked to better understand the nature of this peril and develop analytics methodologies that are consistent with the wider processes and expectations of the market.

Session IV – The Strategy of Reporting Catastrophes and their Impact on Insurer and Reinsurer Financial Results

Mike McClane, Senior Managing Director - Global Head of Market & Security Analysis, Aon

With the increasing frequency and severity of catastrophes losses, the messaging regarding the impact of catastrophes has taken on increased importance to equity and credit analysts. Looking at information that is released regarding catastrophe events, including estimated losses and the related assumptions, there are a number of reasons why the information is not consistent between groups due to different accounting requirements (e.g. U.S. Statutory, GAAP, IFRS 17) as well as how catastrophes are managed and reserved. This session will provide some insights on the strategies used to communicate information on catastrophes and how financial and credit analysts evaluate this information, as well as sorting through some of the related terms and their meanings (equalization reserves, cat budgets, earnings vs capital events).

Session V – Point to Portfolio: From Rate Making to Financial Model Integration

Howard Kunst, Chief Actuary, CoreLogic

David Gregory, Product Management Director, CoreLogic

Join us to explore how catastrophe modeling can be used to inform and enhance decision making across the insurance value chain, from point of underwriting to portfolio optimization with a focus on integrating catastrophe models with financial models. We'll also dive into the challenges and opportunities of using catastrophe models for strategic planning, risk appetite setting, and capital efficiency.

3:45 p.m. Session Change Break

4:00 p.m. - Breakout Sessions

Session I – Is Straight Line Wind (Derechos) Represented Correctly in the SCS Models?

Sylvia Laboy, Senior Scientist, Renaissance Re Risk Sciences
David Hamilton, Senior Scientist, Renaissance Re Risk Sciences

Are hurricane loss curves used for straight line wind?

Session II – Guidewire

Session III – Bank of England's View of Non-natural Catastrophes

Lisa Coomey, Senior Technical Specialist, General Insurance Risk specialist, Prudential Regulatory Authority, Bank of England

How is the Bank of England thinking about non-natcat? They are on the cusp of releasing a non-natcat questionnaire – what prompted this decision and what are they hoping to glean from responses?

Session IV – Exposure Management vs. Cat Risk Management – are They Different or is One a Subset of the Other?

Emma Watkins, Head of Exposure Management & Aggregation, Lloyd's

When life throws you a curveball, what do you do about it? What skills are necessary to expand knowledge and expertise beyond the cat models, to become a better cat risk manager and respond to the less common and non-modeled events?

(continued)

WEDNESDAY, FEBRUARY 28, 2024 (continued)

Session V – Unified Catastrophe Modeling: Moody's RMS Partnership with Nasdaq

Julie A. Serakos, CCRMP, Managing Director – Head of Model Product Management, Moody's RMS
Lonny Bastien, Managing Director, Product Management, Moody's RMS

Managing catastrophe risk is a daunting task, made even more challenging by the need to curate views of risk based on different modeling vendors and in-house models. The cost to support the use of multiple models has become prohibitive, however, the need to access multiple model views remains. Technology should facilitate, not hinder, curating your view of risk. The upcoming integration of Nasdaq's Risk Modeling for Catastrophes platform with Moody's RMS Intelligent Risk Platform brings you one step closer to a unified modeling experience.

4:30 p.m. Session Change Break

4:45 p.m. Breakout Sessions

Session I – The Future of Wine - Should We be Whining?

Chris Zumbrum

With all the talk of climate change and its associated impacts, how will wine, one of our most popular alcoholic beverages, fare in the future? This session will provide a perspective of what winemakers and viticulturists are doing to ensure that the impacts of climate change (i.e., droughts, rising temperatures, wildfires, more frequent events with heavier rainfall, etc.) are minimized and what, if any, takeaways there are for the insurance industry.

Session II – Connecting Climate Science with Cat Risk Management

Dr. James M. Done, Research Scientist, NSF National Center for Atmospheric Research

Frustrated with climate science? Unsure what to do with climate change information? We interviewed experts across the risk management sector to understand how to strengthen connections between climate science and risk management. Come along to this session to find out what we learned and how we as a community may respond.

Session III – Turning Science into Actionable Metrics: From Data Insight to Market Oversight

Dr Kirsten Mitchell-Wallace, Director of Portfolio Risk Management, Lloyd's

Hear about Lloyd's development of a metric to facilitate consistent, actionable analysis of physical climate risk, and how the world's leading insurance marketplace is attempting to filter out the noise in scientific reporting.

Session IV – Exposure Management vs. Cat Risk Management – are they Different Or is One a Subset of the Other?

When life throws you a curveball, what do you do about it? What skills are necessary to expand knowledge and expertise beyond the cat models, to become a better cat risk manager and respond to the less common and non-modeled events?

Session V – Real-Time Catastrophe Event Response & Lessons Learned With Zurich & Impact Forecasting

Vinu Kuriakose, Vice President and Head of Catastrophe Modeling, Zurich Insurance Group
Radovan Drinka, Impact Forecasting
Michal Lorinc, Head of Catastrophe Insight, Impact Forecasting

Join us as we recap significant global events from 2023 including the earthquakes in Turkey and Morocco, Hurricane Idalia in the US, and discuss Impact Forecasting's event response solutions that helped insurers and reinsurers navigate through them in real-time. We also delve into Zurich Insurance Group's first-hand experience with Impact Forecasting's Automated Event Response (AER) service, exploring the best practices employed by Zurich's catastrophe modeling team to respond to catastrophes.

5:15 p.m. Reception sponsored by Impact Forecasting

9:00 p.m.- 11:00 p.m ISCM Night Owl Reception

THURSDAY, FEBRUARY 29 2024

7:00 a.m. Breakfast

8:30 a.m. AI and Insurance

Ashok Krishnan, AXA XL

9:15 a.m. Subject: "Bringing it All Together: How Market Issues Affect Market Stability"

Nancy Watkins, Principal and Consulting Actuary, Milliman

10:00 a.m. Networking Break

10:30 a.m. Adapting Models to Specific Needs

Jesse Nickerson, Senior Director of Product Management, Moody's RMS
Paul Brown, Director of Industry Solutions, CoreLogic
Will Skinner, Head of Business Development, US, Impact Forecasting

Models are used to help understand and quantify uncertainty. As models are used to answer many questions within the risk framework, how can we be sure that the model is fit for purpose? Is the use of the model the same for pricing as it is for risk selection as for portfolio management? How should model users think about getting the most insight out of their use of the catastrophe models?

12:00 p.m. Adjourn

REGISTRATION FORM

Cat Risk Management 2024

February 26-29, 2024, Orlando, FL

REGISTRATION

The registration fee includes program materials, breakfasts, networking breaks, lunches, and evening receptions.

$2195	General Registration
$2095	Early Registration (prior to 1/25/2024)
$2065	RAA Members
$1445	Government Entities
$1025	Insurance Regulators

Conference Location: Loews Portofino Bay Hotel, Orlando, FL, 407-503-1000

Accommodations: The RAA room block at the Loews Portofino Bay Hotel and Hard Rock Hotel have sold out.

Additional Hotels Also on Universal Property:

Loews Royal Pacific Resort -

Loews Sapphire Falls Resort

Universal's Cabana Bay Beach Resort

Universal's Aventura

For more information on accomodations, please visit the Cat Risk Management 2024 webpage for a complete list of additional hotels in the immediate vicinity.

Cancellation Policy: All seminar cancellations must be in writing to the RAA. Refund or credit will be issued up to two weeks prior to the start of the conference. After that date (Monday, February 12, 2024), no refunds or credits will be issued, but substitutes are welcome.

Program/Registration Inquiries: Contact Johnetta Riley at 202-783-8322 or e-mail **riley@reinsurance.org**

PAYMENT OPTIONS

Select one of the following options to register:

☐ **Online at www.reinsurance.org (Education)**
To ensure the security of all credit card information, please go online to www.reinsurance.org to use our secure site to process registrations with credit card payments.

☐ Contact the RAA at riley@reinsurance.org or 202-783-8322 to register by phone.

Loews Portofino Bay Hotel

RAA COVID-19 Protocol

The RAA is planning to host our 2023 Annual Cat Risk Management Seminar, in-person, February 26-29, 2024 in Orlando, Florida.

The RAA and the Loews Portofino Bay Hotel will closely monitor CDC, state, and city guidelines for event compliance, and will continue to update and adopt protocols with your safety as our top priority. The goal of the RAA's Cat Risk Management program is to bring the industry together. We are all looking forward to a safe, in-person educational experience with the opportunity to meet and engage with peers.

We hope to see you in Orlando!

Reinsurance Association of America
1445 New York Avenue, NW, Suite 700, Washington, DC 20005
www.reinsurance.org