

Reinsurance Association of America
Reinsurance Education Institute



RAA

Cat Modeling 2010

February 9-11, 2010, Orlando, Florida

Cat Modeling 2010: Probabilities and Possibilities

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Orlando, FL

Cat Modeling 2010 is a three-day conference that provides an unbiased view of catastrophe models and their impact on risk management. The program features provocative discussion from industry executives and the leading modelers on a variety of scientific, engineering and statistical concepts that form the foundation of catastrophe models and their growing influence on managing risk. The conference is an invaluable networking opportunity for modeling developers and users alike.

General sessions include pandemics, climate change, the validity of cat models and model comparison, quantifying uncertainty in wind estimates, multiple model approaches, terrorism, the importance of non-structural building components and earthquake loss potential, and the New Madrid Seismic Catastrophic Planning Project.

Also featured are panel discussions on windstorm surge and model comparison, and breakout sessions on a wide range of catastrophic risk topics.

The conference concludes with a tour of **Storm Struck**, a new exhibit at Walt Disney World's Epcot sponsored by Renaissance Re.

Who Should Attend

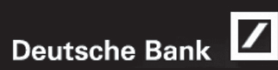
- Professionals from financial institutions, including insurers, reinsurers, and investment banks – who are responsible for risk management functions related to catastrophe risk
- Attorneys who specialize in reinsurance
- Academics
- Federal / state government professionals

2010 CAT MODELING SPONSORS

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2010 CAT MODELING DIAMOND SPONSOR



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TUESDAY, FEBRUARY 9, 2010

8:00 a.m. Cat Modeling Registration Opens

10:00 a.m. ISCM Fourth Annual Meeting of Members

Andrew Castaldi, SVP, Swiss Re, ISCM President

Climate Change: Short term outlook and decadal predictions

Greg Holland, PhD, Director of the NCAR Earth System Laboratory, National Center for Atmospheric Research

11:30 a.m. Lunch

12:30 p.m. Welcome and Introduction

Franklin W. Nutter, President, RAA

Andrew R. Castaldi, SVP, Swiss Re

1:00 p.m. Are Cat Models Real or Memorex?

William I. Riker, President, Riker Consulting

As the science becomes mainstream insurance risk management, political and social issues are emerging. Debate about model accuracy and efficiency is becoming more volatile as affected constituencies cry foul. What can primary users and providers do to help frame a constructive debate?

2:30 p.m. Quantifying Uncertainty in Wind Field Estimates

Srinivas (Sai) Ravela, PhD, Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology

A discussion about the underlying uncertainties in wind field estimates. Learn the questions you should ask modeling companies and what they mean to your model results.

3:30 p.m. Pandemics

Nathaniel Hupert, MD, MPH, Director, CDC Preparedness Modeling Unit, Associate Professor of Public Health and Medicine, Weill Medical College, Cornell University

5:00 p.m. Breakout Sessions

Basic Track: General Modeling Basics

Mark C. Bove, Geo Research Specialist – Meteorology, Munich Re America

This session will explore the four basic building blocks of catastrophe models and how they are adapted in practice for modeling tropical cyclones and earthquakes. The discussion will primarily address stochastic event sets, site intensity calculations, and vulnerability curves.

Basic Track: Implementation of Catastrophe Modeling Within the Food Chain

“A unique forum whereby all of the modeling software companies are challenged by the industry!”

Ann Glennon, Endurance Re of America

“The only truly independent catastrophe modeling conference”

Nick Hassam, Talbot Underwriting

“Great conference to network and discuss issues going on in the reinsurance community.”

Allan Fox, Harbor Point Re

“The independent view of loss modeling”

Peter Taylor, University of Oxford

“The RAA’s Cat Modeling in Uncertain Times conference provided me with invaluable food for thought that is bound to help Tokio Millennium Re better manage our core catastrophe reinsurance business.

David McComas, Tokio Millennium Re

Robert Stevenson, Group Head of Exposure Management at Kiln, Kiln Group Limited

This session will review the role and responsibility of catastrophe modelers to communicate, implement and evolve catastrophe modeling within an organization. The ability to talk in a common language is essential to a successful implementation strategy and helps to overcome preconceived ideas and build credibility in a company.

Basic Track: International Earthquake

Hjörtur Thráinsson, PhD, Senior Corporate Underwriter, Accumulation Risk Management, Munich Reinsurance Company

Advanced Track: Rating Agencies and Catastrophe Modeling Update

Susan Denike, Managing Director, Guy Carpenter & Company

Valerie K. Kloepfer, Senior Vice President, Guy Carpenter & Company



Rating agency treatment of catastrophe risk has evolved over recent years to reflect current modeling capabilities and “lessons learned” from actual events. This session will review how each major rating agency views cat modeling results as submitted by insurers and reinsurers. The session will also include an update on proposed changes for the 2009 reporting year.

Advanced Track: Reinsurance and Residual Market Assessments

Gabor Jaimes, Senior Catastrophe Analyst, Swiss Reinsurance America Corp.

This session will discuss the impact of member assessments from residual markets on pricing of catastrophe excess of loss treaties.

Advanced Track: Insurance Portfolio Optimization/Portfolio Options

Lixin Zeng, PhD, Executive Risk Officer, Validus Re

Cat models help a property (re)insurance company optimally select risks to build a portfolio with a superior risk/return profile. This discussion will define the related analytical framework, introduce the development and implementation of a solution, and demonstrate the application of this approach to a sample insurance portfolio.

6:00 p.m. Adjourn to Reception

WEDNESDAY, FEBRUARY 10, 2010

7:00 a.m. Breakfast

8:30 a.m. Model Comparison

Federico Waisman, PhD, Chief Risk Officer, Arrow Syndicate 1910

The portfolio model comparison will focus on California earthquake. Each model will be compared to its prior version as well as to each other. A standard portfolio will be used for the analysis.

9:45 a.m. Windstorm Surge Panel

Moderator: *Ronald C. Nash, Chair, International Society of Catastrophe Managers*

Panelists: *Peter S. Dailey, PhD, Assistant Vice President & Director, Atmospheric Science, AIR Worldwide*

David F. Smith, Senior VP, Model Development, EQECAT

Claire Souch, PhD, Vice President of Model Management, RMS

A large portion of the losses from Hurricanes Ike and Katrina were due to storm surge. This year our mod-

eling company panel will analyze a simple portfolio and explain how their modeled loss estimates incorporate storm surge. After completion of the company presentations, Ron Nash will moderate a panel discussion on modeling storm surge.

11:30 a.m. Multiple Model Approaches - Strengths and Weaknesses

Karen M. Clark, President & CEO, Karen Clark & Co.

12:30 p.m. Lunch

1:45 p.m. Breakout Sessions (Repeated from Tuesday)

3:00 p.m. Breakout Sessions

Basic Track: Next Generation Geocoding, Land Parcel Information, and Other Resources for Collecting Data Information

Brady Foust, PhD, Consulting Geographer, First American Spatial Solutions

Basic Track: European Flood

Jane Toothill, PhD, Technical Director, JBA Consulting

This presentation will provide a brief overview of European flood models, then focus on some key strengths and weaknesses from the perspective of an insurance user. Issues considered will include level of accuracy, scope, applicability of vulnerability functions, what is not covered by the models and transferability of the approaches used to other countries worldwide.

Advanced Track: Future of Cat Modeling: Complementing Software with Lateral Networks and Open Source Strategies

Rowan Douglas, Head of WW Analytics, Willis

Matt Huddleston, PhD, Principal Consultant - Climate Change, Met Office Consulting

Gero Michel, PhD, SVP & Head of International Cat Underwriting and Cat Analytics, Endurance Specialty Insurance

In the 25 year history of insurance-related cat modeling, knowledge from multi-lateral networks via scientific organizations has created a constant evolutionary drive, augmenting and improving cat models. This session will address the future direction of cat

“I came to this Seminar with lots of questions and went home with all the answers. This Seminar exceeded all my expectations. It’s an excellent investment of time and money, and a superb venue to network with movers and shakers of the reinsurance and insurance industries.”

Michael L. Delacruz, Aon Benfield



modeling, assessing how community-scale open source projects and the integration of cutting-edge science has the potential to increase competition, allow further stability in model application, peer-review, and growth.

Advanced Track: Tropical Cyclone Storm Surge and Inland Flood Risk Modeling

Sergei Frolov, PhD, Senior Research Scientist, WeatherPredict Consulting

TC storm surge and inland flood risk is evaluated through stochastic modeling approach. High resolution fully dynamical models of storm surge and inland flood are used to model hypothetical TC landfall events to obtain accurate estimates of expected losses. Dynamical models are calibrated against historical events.

Advanced Track: Catastrophe Bond Market Update, Model Uncertainty, Parametric Risk, TBA

Advanced Track: Emerging International Perils, TBA

4:30 p.m. Breakout Sessions Repeated

5:30 p.m. Reception

THURSDAY, FEBRUARY 11, 2010

7:30 a.m. Breakfast

8:30 a.m. General Session – Terrorism

Elana DeLozier, Intelligence Research Specialist, NYPD Counterterrorism Bureau (invited)

10:00 a.m. The New Madrid Seismic Catastrophic Planning Project: Enhancing Risk Modeling by Including Social Impacts and Needs Assessment

James M. Wilkinson, Jr., Executive Director, Central US Earthquake Consortium

Theresa Jefferson, DSc, Associate Professor, Center for Technology, Security, and Policy, Virginia Polytechnic Institute and State University

This presentation discusses the results of the analysis of a catastrophic earthquake in the New Madrid Seismic Zones. Along with the direct physical impacts, the analysis provides an estimate of both the social impacts and disaster response requirements.

11:00 a.m. Importance of Nonstructural Building Components and Earthquake Loss Potential

Michael J. Griffin, P.E. - Principal, Structural Engineer, CCS Group

Earthquakes cause significant damage to nonstructural components, equipment, and systems. This in turn

drives losses, recovery costs, and loss of revenue due to business interruption. This session will highlight faults inherent in the seismic design and construction of nonstructural components that contribute to the high percentage of losses, and present solutions to reduce damage to nonstructural components to ensure that facilities are able to quickly return to business-as-usual after an earthquake.

Noon

Lunch

1:30 p.m. Modeler Breakout Sessions

Each modeling company will discuss the challenges, issues and assumptions utilized in developing a comprehensive industry exposures database. The industry exposures database is a critical tool in developing both benchmark analysis and real time event estimates, and each presenter will provide their roadmap in achieving this immense task.

1. AIR
2. Baseline Management
3. EQECAT
4. RMS

2:45 p.m. Modeler Breakout Sessions

1. AIR
2. Baseline Management
3. EQECAT
4. RMS

4:00 p.m. Modeler Breakout Sessions Repeated

1. AIR
2. Baseline Management
3. EQECAT
4. RMS

5:00 p.m. Reception

6:00 p.m. Board Buses to StormStruck at Epcot Sponsored by Renaissance Re

RenaissanceRe and its affiliate, WeatherPredict, are sponsors of StormStruck, a new exhibit at Walt Disney World's Epcot. StormStruck combines exhilarating 3D special effects, interactive audience participation, and post-show information to raise awareness about weather risk mitigation research and recommendations. Visit www.stormstruck.org for more information.

“Professional, educational, and well-organized. The conference provides a friendly, engaging environment for professionals of the property insurance and reinsurance catastrophe field.”

Simon Hudson, Collins

REGISTRATION FORM

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REGISTRATION

Select one of the following options to register:

- **Online at www.reinsurance.org**
(Click on Education, Cat Modeling Orlando)
- **Fax** the completed form in this brochure to the RAA at 202.638.0936.
- **Mail** the completed form in this brochure to the RAA at 1301 Pennsylvania Avenue, NW, Suite 900, Washington, DC 20004.

The registration fee includes program materials, breakfasts, refreshment breaks, lunches, and evening receptions. All attendees must be pre-registered; there is no onsite registration.

Accommodations: The Peabody Hotel is offering attendees a discount rate of \$239/night. The deadline for this rate is January 14, 2010. The hotel is located at 9801 International Drive, Orlando, FL. Contact the hotel directly at 407.352.4000 or 1.800.PEABODY to make your room reservations and mention the Reinsurance Association of America room block to get the discount rate.

Cancellation Policy: Seminar cancellations must be made in writing to the RAA, by mail, email to meetings@reinsurance.org, or by fax to 202.638.0936. Full refunds will be issued for cancellations received by January 26, 2010. No refunds will be issued after that date; however, substitutes are welcome.

Program/Registration Inquiries: Contact 800.259.0199 or e-mail meetings@reinsurance.org

The conference is for educational purposes and will be held in strict compliance with the RAA's antitrust policy.

Full Name _____

Nickname _____

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CE Credits: I would like to receive continuing education credits for:

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Payment is enclosed for:

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