

Florida Commission on Hurricane Loss Projection Methodology Continuing Education and Training Workshop Agenda

Catastrophe Computer Simulation Models

Thursday, February 20, 2003
Hermitage Centre
Conference Call (850) 488-5776 or Suncom 278-5776
Tallahassee, Florida
9:00 AM to 4:00 PM
Lunch 12:00 PM to 1:00 PM

- I. History of Catastrophe Modeling
- II. Florida Commission on Hurricane Loss Projection Methodology Process
 - A. Development of Modules
 - B. Development of Standards
- III. General Overview of Catastrophe Models
- IV. Comparison of Modeling Approaches
 - A. Model Summary
 - B. Hurricane Event Set
 1. Definition of event
 2. Statistical methods used to generate hypothetical storms
 3. Probability distributions for event parameters
 4. Physical description of hurricanes in model
 5. Event frequencies and annual occurrence rates by region
 - C. Vulnerability Functions/Damage Estimation
 1. Categories – structure types, insurance coverages
 2. Construction quality, building code enforcement
 3. Engineering analysis, empirical data, researcher opinion
 - D. Insurance Calculations
 1. Insurer Inputs – appurtenant structures, contents, additional living expense
 2. Policy Terms – deductibles, policy limits
 3. Insurance to Value
 4. Uncertainty in loss estimates
 5. Validations – actual loss to modeled loss

- E. Probable Maximum Loss/Average Annual Loss/Loss Costs
 - 1. Probable maximum loss comparisons
 - 2. Relationship between construction types
 - 3. Relationship between insurance coverages
 - 4. Geographic/spatial relationships
 - 5. Relationship between models
- F. Model Summary Review
- V. Future of Catastrophe Modeling
 - A. Hazard Data
 - B. Meteorological Data
 - C. Damage Estimation
 - D. Forecasting