RESEARCH AND NATCAT MODELLING FROM AN INSURER PERSPECTIVE

Madeleine-Sophie Déroche / AXA Group Risk Management
Research and NatCat modelling from an insurer perspective

Synthesis of past / current activities

UNDERSTANDING HAZARD

- Literature
- Attend workshops / conferences
- Research projects fundings

EVALUATE THIRD PARTY MODELLING

- Literature
- Data
- Tools development

DEVELOP OUR OWN VIEW OF THE RISK

- Participate in workshops
- Research partnerships
II. Consistency

II.1 Geographical Consistency

<table>
<thead>
<tr>
<th></th>
<th>Geographical Scope (Complteness of Basin)</th>
<th>Overall Agreement with Hazard Mapping</th>
<th>Inter Country Correlation</th>
<th>Local Deficiencies</th>
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<tbody>
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V. Hazard Module - Physical Characteristics of Models

V.1 Completeness of Risk Modelling

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<thead>
<tr>
<th></th>
<th>Storm Surge</th>
<th>Summer Windstorms</th>
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V.2 Event set Generation

<table>
<thead>
<tr>
<th></th>
<th>Use of academic work/partnership with research</th>
<th>Data Used - Accuracy / Completeness</th>
<th>Historical Footprints Generation</th>
<th>Stochastic Footprints Generation</th>
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V.3 Event Severity (Methodology - Validation)

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<th>Methodology:</th>
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<tbody>
<tr>
<td>B</td>
<td>Use of academic work/partnership with research</td>
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<td>Local Wind Modelling</td>
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<tr>
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<th>Validation</th>
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<tbody>
<tr>
<td>B</td>
<td>Stochastic Eventset Severity/Location</td>
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V.4 Event Frequency (Methodology - Validation)

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<th>Methodology</th>
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<tr>
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<th>Validation</th>
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<tr>
<td>B</td>
<td>Validation of Frequency (Climate data, Historical losses, Research)</td>
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</tbody>
</table>
Research and NatCat modelling from an insurer perspective

**Synthesis of past / current activities**

- **UNDERSTANDING HAZARD**
  - Literature
  - Attend workshops / conference
  - Research projects fundings

- **EVALUATE THIRD PARTY MODELLING**
  - Literature
  - Data

- **DEVELOP OUR OWN VIEW OF THE RISK**
  - Participate to workshops
  - Research partnerships

**DEVELOP TOOLS / INFRASTRUCTURE TO INTEGRATE / DISSEMINATE RESEARCH IN OUR ACTIVITIES**
Research and NatCat modelling from an insurer perspective

Questions for the future

NatCat modelling

- What are the hot topics in research
- What will be the « best » modelling approach in 5 years?
- How to include « sub-peril » modelling ?
- Should climate change scenarios be included ?

Questions from the business

- My historical claims do not fit the annual average loss of the model
- What impact will have the event they talked about this morning ?
- How physical risks / climate change will impact our assets ?
- Can NatCat models be used for pricing ?