Oasis Loss Modelling Framework

Background

June 2016

Opening up the world of Cat Modelling and delivering choice
Agenda

• Background to Oasis
• Opportunities with Oasis
• Standards
• Insurance Development Forum
• Oasis benefits
• Questions we need to address?
Oasis mission

• Improve risk assessment through better models, transparency, performance, and innovation
• Provide open source software and an open framework for model and software development
• Establish a commercially vibrant community of providers and users of Oasis software, models, data, and tools
Oasis vision

• To be the main alternative platform for the Insurance sector and the main platform for non-Insurance catastrophe model use.
• To be a focal point for community engagement and standards in the area of catastrophe modelling.
• By being open and curating open source software enabling a wide community of users to add innovation, richness and scale to our mission.
What is Oasis?
A software platform and a community

- A flexible plug and play framework and platform with a new front-end
- Allows hazard, vulnerability and user interface specialists to easily offer their products
- Gives users the choice of provider, method of integration and IT environment
- Provides full uncertainty information
- Enables users to choose their view of risk
Oasis LMF Ltd Members – 43 →

- ClimateKIC
- Lloyd’s
- SCOR
- XL Catlin
- Validus
- Ren Re
- TigerRisk Partners
- Cathedral
- Novae
- Zurich
- Liberty
- Aspen
- Aon Benfield
- Guy Carpenter
- Willis
- Partner Re
- Allianz
- Axis
- Amlin
- Tokio Millennium Re/Kiln
- Suncorp
- JLTRe
- GenRe
- Swiss Re
- Beazley
- Argo
- Ark
- Ascot
- Barbican
- Brit
- Canopius
- Chaucer
- Hardy
- Mitsui Sumitomo
- QBE
- R&Q
- W R Berkley
- XL
- Axa
- ANV
- Ace
- Markel
- Hannover Re

and more in the pipeline, though some are merging …
Oasis projected Model Coverage 2016

Over 70 models from 12 providers
Opportunities with Oasis - Standards

• Oasis code creates standard for model interoperability that others can’t match either technically or operationally

• The World Bank have endorsed the Oasis platform for use in their projects

• The Insurance Development Forum (IDF); Risk, Modelling and Mapping Group have suggested Oasis for use in their own analysis

• Working on the development of a global Industry Exposure dataset to include Agriculture and Infrastructure
IDF-RMMG Mission statement

• To increase collaboration, efficiency, and applicability in the quantification, analysis, understanding of, and communication about, natural hazards risk and associated uncertainty.

• To do this by developing model and data standards and methods of interoperability and to achieve this using methods and practices that are broadly applicable, repeatable, scalable, efficient and reduce duplication.

• Our product must be directly applicable to augmenting the provision of insurance and insurance style contingent risk capital solutions.
Goals of RMMG (key areas)

• Catalogue existing capabilities, data, models and platforms and de-facto standards that might be brought to the questions at hand and assess any gaps and potential ways to fill them.

• Reduce the current duplication of effort, inefficiency, variability of quality, inapplicability and unrepeatability of many activities that are undertaken to develop hazard and risk understanding currently.

• Develop a framework that those involved may follow in the quantification of hazard and risk for the improvement of the resiliency of societies and economies to more efficiently inform the decision process.

• Develop standards for data, models and platforms that will enable more efficient development and donor focus towards more efficient and consistent understanding of risk.
If...

Standards are adopted by users

Then...

Provide an open source, transparent, standardized approach for climate catastrophe risk modeling

Build a community of suppliers and users to serve each others needs for mutual benefit

Develop an open access e-Marketplace with match-making facility to link demand and supply for models

“The Platform”

FUNCTIONS/SERVICES

OUTCOMES

IMPACTS

GOAL

Commitment for more than 70 models from 12 different model providers and connected with users

Cost of accessing data/models decreases by 50% through increased competition & economies of scale

Standards are adopted by users

More people can understand & build cat risk models

Improved understanding of risk allowing improved underwriting

Improved understanding of risk allowing more efficient use of capital in light of capital requirements

Insurance products offered increases as new territories and perils are covered

Decision-makers (policy & business) use catastrophe risk modeling to support adaptation planning and investment decisions

Decision-makers are empowered to better manage climate related risks

Reduce costs of using and building catastrophe models

Insurance products offered increases as new territories and perils are covered

Improved understanding of risk allowing more efficient use of capital in light of capital requirements

Decision-makers are empowered to better manage climate related risks

Reduce costs of using and building catastrophe models

INCREASED RESILIENCE TO CLIMATE-RELATED CATASTROPHES AND IMPROVED UNDERSTANDING AND PROFITABILITY OF RISK ASSESSMENT.
Questions we will need to address?

• How much standardisation can we practically have?
• Where can and should collaboration be increased?  
  – ACORD, GEM, PERILS, Oasis, IDF ?
• What more should we do on validation and transparency of models?
• How many platforms do we need?
• Who owns the standards? How do we create standards?
• Is regulation helping us?
• What role does academia play now and in the future?
Contact details

Oasis Loss Modelling Framework Ltd.

Registered Address:
20-22 Bedford Row
London WC1R 4JS
United Kingdom

Email: info@oasislmf.org

Web: www.oasislmf.org
Basic Copyright Notice & Disclaimer

©2016 This presentation is copyright protected. All rights reserved. You may download or print out a hard copy for your private or internal use. You are not permitted to create any modifications or derivatives of this presentation without the prior written permission of the copyright owner.

This presentation is for information purposes only and contains non-binding indications. Any opinions or views expressed are of the author and do not necessarily represent those of Swiss Re. Swiss Re makes no warranties or representations as to the accuracy, comprehensiveness, timeliness or suitability of this presentation for a particular purpose. Anyone shall at its own risk interpret and employ this presentation without relying on it in isolation. In no event will Swiss Re be liable for any loss or damages of any kind, including any direct, indirect or consequential damages, arising out of or in connection with the use of this presentation.