

Major breakthrough in prediction of financial damage as a result of natural catastrophes

February 6 2014



In what is hailed as the most significant development in the modelling of financial losses as a result of natural catastrophes for 20 years, the EU's main climate innovation initiative Climate-KIC has officially launched the Oasis Loss Modelling Framework last week (29 January 2014).

The new Oasis framework is a software package open to anyone with an interest in creating new catastrophe risk models, with modules available for specific catastrophes. Climate-KIC and its partners have developed a number of commercially available models for:

- Malaysia floods, tropical extreme precipitation, transport vulnerability, insurance policies - Imperial College London
- Fire in Brazil - ARIA
- European storms - CEA/IPSL
- Wind and storms in France - CLIMPACT/METNEXT
- Rainfall vulnerability in the Netherlands - Delft University of Technology
- Flood vulnerability in the Netherlands - DELTARES
- Central European floods - Potsdam Institute for Climate Impact Research

Richard Templer, director of Climate-KIC's UK centre, said: "The models on flooding, storms and fire are particularly timely and bring innovation to the [insurance industry](#) and other risk management."

"The Oasis framework makes a significant contribution in modelling natural catastrophe losses. I am delighted that Climate-KIC has enabled this activity from the outset," Templer said.

Although the insurance industry is expected to be the main user of Oasis, the package can be useful to anyone who is interested in [natural catastrophes](#), not just financial services, but also risk managers in large corporations, governments and inter-governmental bodies.

The project has received €2.8 million in funding from Climate-KIC. It is now co-managed by group of 21 insurers, reinsurers, brokers and Lloyd's of London through a not-for-profit company. For a full list, see: www.oasislmf.org/the-oasis-com...ity-members/members/

A revolution in the catastrophe modelling market

Dickie Whitaker, Project Director of the Oasis Loss Modelling Framework explains, "Oasis allows you to get your own view of risk. Much as apps have revolutionised smart phones, so Oasis can revolutionise the market for catastrophe models."

Oasis is designed to operate as a set of plug-and-play web services, which can be developed to meet many and various needs.

For the insurance industry, the potential benefits include:

- Better informed risk selection, pricing and capital allocation
- More focussed reinsurance negotiation
- Support for regulatory compliance
- Wider choice, greater transparency and reduced cost in modelling

According to Trevor Maynard, Head of Lloyd's Exposure Management and Reinsurance Team, "Oasis provides a global standard to allow model developers to interact worldwide and for insurers to rapid gain access to their insights. That is very exciting and potentially very important."

Project members can put their own models into the framework, and they can invite others, such as reinsurers, to run them, too. They are also able to develop models for sale or licence to other users. Because Oasis lowers the cost barriers to entry, scientific and technical experts can provide fresh views on the scientific and building vulnerability aspects

of catastrophe risk management.

Paul Nunn, Head of Natural Catastrophe Risk Modelling, SCOR Global P&C, comments, "The Oasis framework brings genuine innovation and choice to the catastrophe risk modelling landscape and is particularly welcome against a backdrop of increasing insurance industry requirements."

From the broker's perspective, Paul Miller, International Head of Aon Benfield Analytics' Catastrophe Management team, comments: "The re-insurance industry requires catastrophe modelling solutions to deliver transparency and flexibility across peril models and software platforms. Oasis will assist in the delivery of such requirements and aid end users in developing a bespoke view of risk.'

The EU's main climate innovation initiative

Climate-KIC is the EU's main climate innovation initiative. It is Europe's largest public-private innovation partnership focused on mitigating and adapting to climate change.

The initiative consists of over 200 large companies, small and medium sized enterprises, academic institutions and the public sector, including partners such as Bayer, Imperial College London, KLM, the Potsdam Institute for Climate Impact Research, ETH Zurich and GDF Suez. For a full Climate-KIC partner overview see: www.climate-kic.org/partners

Climate-KIC is one of the Knowledge and Innovation Communities (KICs) created in 2010 by the European Institute of Innovation and Technology (EIT), the EU body tasked with creating sustainable European growth while dealing with the global challenges of our time.

The organisation has its headquarters in London, UK, and operates

through centres across Europe to support start-up companies, to bring together partners on innovation projects and to educate students to bring about a connected, creative transformation of knowledge and ideas into products and services that help mitigate and adapt to climate change.

Provided by Climate-KIC

Citation: Major breakthrough in prediction of financial damage as a result of natural catastrophes (2014, February 6) retrieved 16 July 2024 from <https://phys.org/news/2014-02-major-breakthrough-financial-result-natural.html>

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