



Making Better Re/Insurance Underwriting and Capital Management Decisions with Public-Private-Academic Partnerships

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Similar to 2001, 2004, and 2005, 2011 was another year of unexpected international catastrophe events, in which insured losses were more than twice the expected long-term annual average catastrophe losses of USD 30 to 40bn. Key catastrophe events that significantly contributed these losses included the Mw 9.0 Great Tohoku earthquake and tsunami, the Jan. 2011 floods in Queensland, the October 2011 floods in Thailand, the Mw 6.1 Christchurch earthquake and Convective system (Tornado) in United States.

However, despite considerable progress in catastrophe modelling, the advent of global catastrophe models, increasing risk model coverage and skill in the detailed modelling, the above mentioned events were not satisfactorily modelled by the current mainstream Re/Insurance catastrophe models. This presentation therefore address problems in models and incomplete understanding identified from recent catastrophic events by considering:

- i) the current modelling environment, and
- ii) how the current processes could be improved via:
 - a) the understanding of risk within science networks such as the Willis Research Network, and
 - b) the integration of risk model results from available insurance catastrophe models and tools.

This presentation aims to highlight the needed improvements in decision making and market practices, thereby advancing the current management of risk in the Re/Insurance industry. This also increases the need for better integration of Public-Private-Academic partnerships and tools to provide better estimates of not only financial loss but also humanitarian and infrastructural losses as well.