



Leveraging Catastrophe Models for Post Event Loss Estimates

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Catastrophe modelling is a key part of an Insurer and Reinsurers risk management strategy. A common task required of risk management teams is to estimate the potential loss following an event. Numerous methods exist for estimating losses including aggregation of exposure, and underwriter estimates, but estimates based on catastrophe models are able to provide greater insight. This requires an understanding of the models, and how to use them. The underlying assumptions and potential biases, the model components, and an understanding of the limitations of using stochastic models for a single event are all necessary. For this reason it is important to understand uncertainty around the modelled loss generated by a model, because a single number will not capture all the variation possible within the event itself, the model, or the insured portfolio.

The recent hurricanes of Irma and Maria of the 2017 North Atlantic hurricane season caused widespread damage in the Caribbean. Using these two examples we will aim to demonstrate how catastrophe models can be used to form a key part of loss estimation following a catastrophic event.