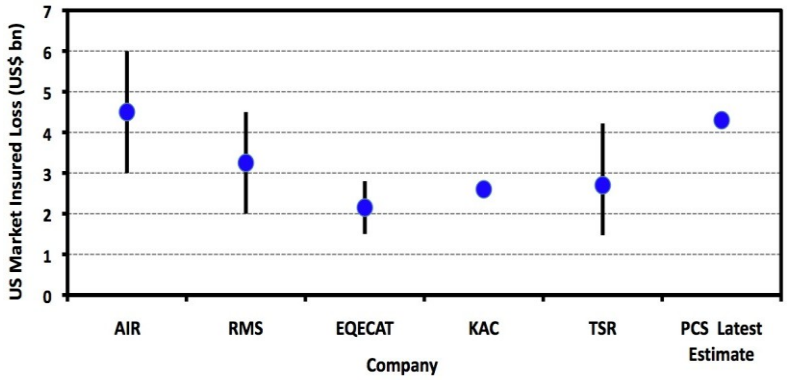
Tropical Storm Risk (TSR) Information Sheet
Issued 24th January 2012

HURRICANE IRENE (2011): PERFORMANCE OF REAL-TIME LOSS ESTIMATES

Hurricane Irene made US landfall on the 27th August 2011 and impacted a large swathe of the US East Coast from North Carolina to Vermont. Irene was the first hurricane to make US landfall since hurricane Ike in 2008. As such, Irene provides the first test of the performance of the recent developments in hurricane real-time loss forecasting.

This information sheet compares the performance of the TSR forecast and immediate post-event estimates of Irene's market insured loss with the corresponding early loss estimates issued by the cat modelling companies AIR, RMS, EQECAT and KAC (Kinetic Analysis Corporation). The current PCS (Property Claims Service) final insured loss value for Irene of US $ 4.3bn is used as the loss verification.

Comparison of Irene Immediate Post-Event Market Loss Estimates



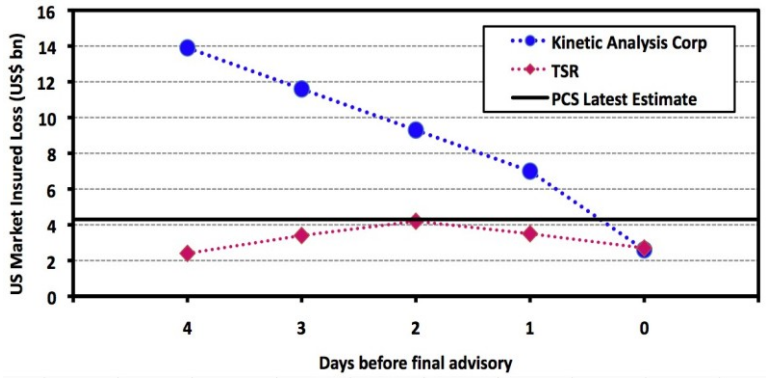
Comparison of the immediate post-event market insured loss estimates for hurricane Irene. These estimates were all issued within 24 hours of the final storm advisory for Irene made at 00UT on the 29th August 2012. Error bars denote the upper and lower bounds of the loss estimate except for TSR where they denote the range where there is a 68% probability that the estimate will lie within this range. Blue dots represent deterministic loss estimates.

Conclusions:

The TSR deterministic immediate post-event market loss estimates for Irene was:

- Low by US$ 1.6bn.
- Correct to within a factor of two (and to within about one standard deviation).
- Comparable in accuracy to the RMS, EQECAT and KAC loss estimates and slightly worse than the AIR loss value.

Comparison of Irene Forecast Market Loss Estimates



Comparison of the pre-event market loss forecasts for Irene issued at different lead times out to four days before the final storm advisory. The comparison includes loss forecasts issued by TSR and Kinetic Analysis Corporation. It is unclear whether comparable loss forecasts were issued by AIR, RMS and EQECAT.

Conclusions:

The TSR deterministic forecast market loss estimates for Irene were:

- Correct to within a factor of two at all lead times.
- More accurate at longer lead times than those issued by KAC.
- Comparable or better in accuracy than the immediate post-event loss estimates issued by RMS, EQECAT and KAC.

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