

# The perfect storm



■ Sponsor Jerry McArthur, left, presents the Risk Management Award to Professor Mark Saunders, lead scientist at Tropical Storm Risk.

SOME MARKET PARTICIPANTS may view winning a British Insurance Award as the culmination of their achievements; a sign their efforts have been recognised. However, that in no way reflects the attitude of this year's winners of the Risk Management Award.

Having won the BIA for London Market Innovation in 2004, the collaborative team that sits behind Tropical Storm Risk promptly turned their cerebral resources to the next level of challenge. They put their heads together, used the award-winning Tropical Storm Tracker as a starting point and focused their attention on taking hurricane-forecasting capabilities up a gear.

The result was three successive launches of hurricane forecasting innovations within a 12-month period, each of which provided a significant advance in identifying and managing the risk and loss from US hurricanes for insurers and reinsurers.

TSR is a forecasting venture that provides products to benefit risk management and decision making within not only the insurance industry but also other business sectors, government and society. Led by Professor Mark Saunders of the Benfield Hazard Research Centre at University College London, TSR comprises experts on insurance, risk management and climate prediction and is co-sponsored by Benfield, Royal & SunAlliance and Crawford and Company.

When the judges came to deliberate on the relative merits of those short-listed for this award, TSR emerged as the unanimous vote-winner. Comments included "incredibly user-friendly", "an amazing free service to have" and "a truly useful global tool for insurers and others that has continued to innovate".

One judge commented: "This real-time monitoring, web-based service is not only a highly collaborative venture but one that has moved on significantly, receiving in excess of one million hits."

The three innovations are enhanced US landfalling hurricane damage prediction prior to the hurricane main season starting; a model for adjusting the standard loss probabilities in hurricane peril models to reflect the latest seasonal US hurricane forecast; and a wind speed probability online graphical product launched for tropical storms worldwide.

The first was announced on 21 April 2005, providing warnings from early August on the likelihood of high, average and low hurricane damage. As a result, government, emergency planning bodies and insurers with US interests are now able to better manage their financial risk during each season of activity. The second was announced in a white paper on 26 October last year and signified the first time climate information has been used to adjust the output from a catastrophe model.

The third innovation, added on 16 August, mapped the likelihood that any point on the map will be struck by a hurricane or tropical storm strength one-minute sustained wind speed over the next five days. Previously, insurers could only guess at the chance that a given location would be struck but this new tool has allowed users to assess the likelihood — at a

After winning the London Market Innovation British Insurance Award in 2004, the team behind Tropical Storm Risk decided to raise the bar. And, as **Lynn Rouse** reports, it has succeeded in scooping this year's Risk Management Award with its hurricane forecasting offerings.

glance and days ahead — helping determine risk management strategies.

Over its five-year history, the TSR consortium has become the leading venture worldwide for forecasting the risk from tropical storms. These latest hurricane modelling advances and new forecasting tools will doubtless have a lasting influence and underpin further developments in hurricane risk management. In particular, following TSR's pioneering lead in using climate outlooks to adjust the probabilities in hurricane models, Risk Management Solutions and other catastrophe modellers are reviewing their hurricane peril models based on projections for multi-year hurricane activity.

And development by no means stops here. TSR will be applying innovation three to offer automatic storm e-mail alerts triggered by the forecast occurrence likelihood of tropical storm strength and/or hurricane strength winds over land reaching a user-preferred threshold. This new service will be available for all basins and territories from this summer.

Testimonials on TSR's achievements have also been received from influential market figures. Speaking to the Miami insurance industry, Lord Levene, chairman of Lloyd's, said: "One of the main lessons to be learnt from the damaging 2004 and 2005 Atlantic hurricane seasons is the forecasting achievements of TSR. Although hurricane forecasting first appeared in the 1980s, forecasters have been trying for decades, without success, to deliver accurate predictions on US landfall activity. Scientists at TSR have made a major step forward in this regard. They are the first to offer a level of precision that is of practical use."

Further evidence for the achievement of these forecasting innovations can be found in the fact that the TSR website received 1 050 000 hits in 2005 — a 170% rise on 2004. Furthermore, the team has been asked to expand its service of tropical storm emergency alert feeds to include the Humanitarian Early Warning Service of the United Nations World Food Programme and to deepen its feed of risk information to Reuters AlertNet — the global humanitarian news portal.

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## Finalists 2006

- QBE European Operations
- RBIG Corporate Risk Services
- Tropical Storm Risk
- Zurich Risk Services

## Winning Words

Tropical Storm Risk's **Professor Mark Saunders** takes to the Royal Albert Hall stage once more to accept a hit prediction.

Having accepted the London Market Innovation of the Year award in 2004 on behalf of Tropical Storm Risk, lead scientist Professor Mark Saunders is no stranger to taking the spotlight at the Royal Albert Hall. So how did it feel to make the return visit and scoop the Risk Management Award, a return he accurately predicted two years ago due to planned enhancements?

"It's a real testament to the sustained hard work by those responsible for TSR and a prime example of the insurance industry benefiting from academic expertise," he said. "I can't think of another award that has been won where insurance and academia have collaborated in this way, drawing on academic expertise to improve the assessment of risk and risk management for insurers and reinsurers."

In addition to thanking the initiative's three sponsors — Benfield, Royal & SunAlliance and Crawford and Company — Professor Saunders was keen to acknowledge the three other scientists and researchers that he works alongside. "Dr Adam Lea, Dr Peter Yuen and Dr Benjamin Lloyd-Hughes have all contributed to the advances that have helped us win this award."

Based on their success, it is unlikely that the market will have seen the last of this team: "Just this week we launched the availability of free e-mail alerts, enabling subscribers to see charts of any place in the world being hit by hurricane strength winds up to five days ahead. Also, in the autumn, we will be introducing five-day forecasts of rainfall from live tropical storms, with more to come next year."