

Report Date: 27 May 2009

GC ForeCat™ Updates US Landfall Rates for 2009 Hurricane Season

GC ForeCat is a product developed by Guy Carpenter in collaboration with WSI Corporation, the world's leading provider of weather-driven business solutions, that provides pre-season hurricane landfall forecast rates for different regions in the United States. GC ForeCat revolutionises hurricane forecasting by estimating the rate of landfall for regions along the US coastline. Four different regions (Gulf, Florida, Southeast and Northeast – see Figure 1 on page 2) are derived with associated likelihood of tropical cyclones making landfall in each area. This is the last update for the 2009 hurricane season.

The fifth and final 2009 GC ForeCat update was released on 26 May 2009 and the results are shown in Table 1 below (along with average landfall rates between 1951 and 2007). According to the May update, the Gulf region remains most vulnerable to tropical cyclones coming shore in the United States in 2009. The rate of 0.65 for the Gulf represents the mean number of landfalling tropical cyclones in that region for the forthcoming 2009 hurricane season (compared to the 1951-2007 average landfall rate of 0.66). For the Southeast region, meanwhile, a forecast 0.36 mean rate of landfall has been calculated for 2009 (slightly lower than the long term average of 0.41) while the regions of Florida and the Northeast have mean landfall rates of 0.29 and 0.21, respectively.

Table 1: GC ForeCat Landfall Rates

Region	May 2009 Forecast Landfall Rate	1951-2007 Average Landfall Rate
Gulf (coastline from Texas to Alabama-Florida border)	0.65	0.66
Florida (entire Florida coastline)	0.29	0.49
Southeast (coastline from Atlantic Florida-Georgia border to Cape Hatteras)	0.36	0.41
Northeast (coastline from Cape Hatteras to Maine)	0.21	0.29

GC ForeCat was first developed for the 2008 hurricane season, utilising hurricane landfall data from 1951 to 2007 together with corresponding climate/ocean data, representative of North Atlantic oscillation, Tropical Atlantic Water Temperatures and El Niño/La Niña. The skill of this forecast has been established using historical storm seasons and “hold-one-out” analyses.

Using [i-aXs®](#), Guy Carpenter's web-based risk management platform, analysts will calculate exceedance probability (EP) curves, based on vendor cat models, for client and industry exposures falling within each region. With this deeper detailed information, Guy Carpenter clients who subscribe to i-aXs now benefit from improved risk management capabilities, enabling them to manage their reinsurance purchases more effectively.

Figure 1: Boundaries of Four GC ForeCat Regions in United States

For more information on GC ForeCat, please click [here](#) or contact Priyantha Perera at Guy Carpenter at priyantha.perera@guycarp.com.

Sources: Guy Carpenter, WSI Corporation

For more CAT-i reports and further information on the service, please click <http://www.guycarp.com>.

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