









28 May 2004

Higher-than-Normal 2004 Atlantic Hurricane Season Predicted by TSR Consortium

Pre-season outlook anticipates a year with activity 125% of average and above-normal to 60% probability

London, 28 May 2004—Tropical Storm Risk (TSR), the consortium of experts on insurance, risk management and seasonal climate forecasting led by the Benfield Hazard Research Centre at University College London, today issued projections for an above-normal Atlantic hurricane season in 2004. TSR's pre-season projections for the 2002 and 2003 hurricane seasons both proved accurate.

TSR's pre-season outlook for 2004 anticipates Atlantic basin and U.S. landfalling hurricane activity being 125% of average in 2004. There is a 60% probability of an above-normal hurricane season, a 30% probability of a near-normal season and only a 10% chance of a below-normal season. This represents a slight downgrading on earlier projections. TSR anticipates four tropical storm strikes on the U.S. in 2004 of which two will be hurricanes. Two tropical storm hits, including one hurricane, are foreseen for the Caribbean Lesser Antilles. For the Atlantic basin as a whole, TSR expects 13 tropical storms, with seven of these being hurricanes and three intense hurricanes.

Dr Mark Saunders, the TSR lead scientist, said the two climate factors influencing the TSR hurricane forecast for 2004 are the expected values in August and September 2004 for the speed of the trade winds which blow westward across the tropical Atlantic and Caribbean Sea and the temperature of the sea waters between West Africa and the Caribbean where many hurricanes develop. The former influences cyclonic vorticity (the spinning up of storms) in the main hurricane track region, while the latter provides heat and moisture to power incipient storms in the main track region. "We anticipate slightly weaker than normal trades and slightly warmer than normal waters in 2004; conditions which both have an enhancing effect on hurricane activity", said Saunders.

While the damage from US striking tropical storms and hurricanes between 2000 and 2003 has not been excessive, Saunders warns against future complacency. "Historically one in four of all Atlantic hurricanes have struck the US" he said. "However, over the past four years this ratio has fallen to just one in nine. This situation must soon correct itself and when it does we will witness far greater damage and disruption".

TSR has an impressive forecast track record. Recent long-range forecast successes include those for the 2002 and 2003 Atlantic hurricane seasons, the 2002 and 2003 Northwest Pacific typhoon seasons, and for the 2001/2, 2002/3 and 2003/4 Australian-region tropical cyclone seasons. For the 2004 Atlantic hurricane season TSR will be issuing updated seasonal forecasts in early June, July and August. The August update will also include the first release of an improved model for predicting US landfalling hurricane activity. TSR forecasts may be accessed through the website www.tropicalstormrisk.com.

Hurricanes rank above earthquakes and floods as the U.S.'s most expensive natural disaster. The average damage bill per year from hurricane strikes on the continental US 1950-2003 is estimated to be US \$ 5.1 billion at 2003 prices and exposures.

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Notes to Editors:

About Tropical Storm Risk (TSR):

Founded in 2000, Tropical Storm Risk (TSR) offers a leading resource for forecasting the risk from tropical storms worldwide. The venture provides innovative forecast products to increase risk awareness and to help decision making within the (re)insurance industry, other business sectors, government and society. The TSR consortium is co-sponsored by Benfield, the leading independent reinsurance intermediary, Royal & Sun Alliance, the global insurance group, and Crawford & Company, a global claims management solutions company. The TSR scientific grouping brings together climate physicists, meteorologists and statisticians at University College London and the Met Office.

About Benfield Hazard Research Centre:

Benfield Hazard Research Centre is sponsored by Benfield, the leading independent reinsurance intermediary and risk advisory business. Benfield's customers include many of the world's major insurance and reinsurance companies as well as Government entities and global corporations. Benfield employs over 1,700 people based in over 30 locations worldwide. www.benfieldgroup.com

With over forty researchers and practitioners, the Benfield Hazard Research Centre is Europe's leading multidisciplinary academic hazard research centre and comprises three groups: Geological Hazards, Meteorological Hazards and Seasonal Forecasting, and Disaster Studies and Management. The Centre is based at University College London, which along with Oxford and Cambridge, is one of the UK's top three multi-faculty teaching and research institutions. www.benfieldhrc.org