



Above Average Atlantic Hurricane Season Anticipated by TSR Consortium

London, 6th August 2001

On the day tropical storm "Barry" pounded Florida and Alabama, the Tropical Storm Risk (TSR) consortium issued renewed above-average projections for the 2001 Atlantic hurricane season.

The number of tropical storms and hurricanes striking US shores in 2001 are expected to be 20-30% above the 1991-2000 average. Strikes on the Caribbean Lesser Antilles are anticipated to be 10-20% above the 10-year average, and Atlantic basin hurricane activity is expected to be 10% above the 1991-2000 average.

TSR anticipates four tropical storm strikes on the USA in 2001 of which two will be hurricanes. Two tropical storm hits on the Caribbean Lesser Antilles are foreseen of which one will be a hurricane. For the Atlantic basin as a whole, TSR expects twelve tropical storms, with seven of these being hurricanes and three intense hurricanes. These projections are downgraded slightly on those issued in early July.

TSR's lead scientists Dr Mark Saunders and Dr Paul Rockett of the Benfield Group Hazard Research Centre at University College London (UCL) have developed - in collaboration with the UK Met Office and insurance industry - innovative long-range forecasts for tropical cyclone activity around the world. These forecasts benefit society, business and government by reducing - through the available lead-time - the risk and uncertainty inherent to varying active and inactive storm seasons

"Our projections for 2001 point to 1995-2001 becoming the most active 7-year period for Atlantic hurricanes on record" said Saunders. The total of 56 hurricanes would surpass by one the previous highest 7-year total set in 1949-1955. "There can be little doubt the Atlantic has entered a more active hurricane phase" he stated.

The two main climate factors influencing the TSR seasonal Atlantic hurricane forecasts are the expected August and September values for (a) the temperature of sea waters between west Africa and the Caribbean, and (b) the speed of the trade winds which blow westward across the tropical Atlantic and Caribbean Sea. TSR anticipates warmer than normal waters and weaker than normal trades in 2001; conditions both favouring an active hurricane season.

Hurricanes rank above earthquakes and floods as the USA's costliest natural disaster. The annual damage bill in the continental US from hurricane landfalls 1926-2000 is estimated to be US \$ 5.1 billion (2000 \$).

In May 2000, the TSR team exactly predicted the numbers of NW Pacific tropical storms (25), typhoons (14), intense typhoons (7) and Japan-striking typhoons (2) occurring in 2000. In December 2000, the team accurately forecast the numbers of Australian-region tropical storms, severe tropical cyclones, and Queensland-striking tropical storms during the 2000/2001 season

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Notes to Editors:

TropicalStormRisk.com (TSR)

TSR is a venture which has developed from the UK government-supported TSUNAMI initiative project on seasonal tropical cyclone prediction. The TSR consortium comprises leading UK insurance industry experts and scientists at the forefront of seasonal forecasting. The TSR insurance expertise is drawn from *Benfield Group*, a leading independent global reinsurance and risk advisory group, the *Royal and Sun Alliance* insurance company, and from the UK composite and life company *CGNU Group*. The TSR scientific grouping brings together climate physicists, meteorologists and statisticians at *UCL* (University College London) and the *Met. Office*.

Atlantic Total Numbers in 2001

		<u>Intense Hurricanes</u>	<u>Hurricanes</u>	<u>Tropical Storms</u>
TSR Forecast (\pm SD)	2001	2.9(\pm 1.3)	6.9 (\pm 1.4)	11.8 (\pm 2.0)
Average (\pm SD)	1991-2000	2.7(\pm 1.8)	6.4 (\pm 2.6)	10.8 (\pm 3.6)

Key: Intense Hurricane = 1 Minute Sustained Wind > 95Kts = Hurricane Category 3 to 5
Hurricane = 1 Minute Sustained Wind > 63Kts = Hurricane Category 1 to 5
Tropical Storm = 1 Minute Sustained Wind > 33Kts
SD = Standard Deviation
Forecast Error = Standard Deviation of Independent Hindcast Errors for 1986-2000

USA Landfalling Numbers in 2001

		<u>Hurricanes</u>	<u>Tropical Storms</u>
TSR Forecast (\pm SD)	2001	1.7 (\pm 0.9)	3.7 (\pm 1.3)
Average (\pm SD)	1991-2000	1.3 (\pm 1.2)	3.1 (\pm 1.8)

Key: Landfall Strike Category = Maximum 1 Minute Sustained Wind of Storm Coming Within 30km of Land
USA Mainland = Brownsville (Texas) to Maine

Caribbean Lesser Antilles Landfalling Numbers in 2001

		<u>Intense Hurricanes</u>	<u>Hurricanes</u>	<u>Tropical Storms</u>
TSR Forecast (\pm SD)	2001	0.4(\pm 0.4)	0.7 (\pm 0.5)	1.7 (\pm 0.8)
Average (\pm SD)	1991-2000	0.3(\pm 0.4)	0.7 (\pm 0.7)	1.3 (\pm 1.0)

Key: Landfall Strike Category = Maximum 1 Minute Sustained Wind of Storm Coming Within 30km of Land
Lesser Antilles = Island Arc from Anguilla to Trinidad Inclusive

The full forecast may be viewed as a PDF download at the TSR web site: <http://tropicalstormrisk.com>.