Storminess Prediction for the Year 2011 – Close Out

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The Forecast of 2011

With the year 2011 winding down, it is time to reflect on the storminess analysis and the past forecasts. On 19 April 2010, the storminess forecast was published in the Green County Daily World. (http://gcdailyworld.com/story/1627667.html).

It is very likely (82 percent probability) that next year, the year 2011, will be another extreme weather year. If the multi-decadal cycle remains in the strong hurricane phase, the year will likely produce a minimum of five major Atlantic hurricanes. But this strong hurricane phase began in 1995 and this cycle will be coming to an end soon. If this occurs in 2011, storminess rather than producing an extreme hurricane season; might materialize as a strong tornado season likely producing a minimum of 23 major U. S. tornadoes (Enhanced Fujita scale EF4-EF5).

The year 2011 produced 23 major U. S. tornadoes. These major tornadoes combined with the 3 major Atlantic hurricanes made this an extreme weather year. These extreme weather events validated the storminess prediction made a year earlier.

To date, the storminess tool has made a total of three forecast and these subsequently were shown to be completely accurate. This is a long-range tool and the last two forecast were made over a year in advance of the targeted seasons.

Other Discussion

The strong hurricane phase of the multi-decadal cycle, which began in 1995, has come to an abrupt end. What will come next is still unknown. It will either be a strong tornado phase or a mixed phase.

There are 4 phases of storminess. These are major U. S. tornadoes, major Atlantic hurricanes, mixed and quiet. From 1950-1969, storminess was manifest as a mixed phase. From 1970-1976, storminess was manifest as an extreme U. S. tornado phase. Then 1977-1983 produced quiet years with very little storm intensity. From 1984-1993, storminess returned back to the tornado phase. From 1995-2010, storminess was in an extreme Atlantic hurricane phase.

In a mixed phase, storminess could produce an extreme hurricane year or an extreme tornado year but not both during the same year.

The year 2010 was also an extreme year in storminess. The year produced 5 major hurricanes along with 13 major (EF scale) tornadoes. As a result, the years 2010/2011 represents a double peak. The year 2010 was an extreme year in hurricanes while 2011 was an extreme year in tornadoes. This type of mixed double peaks has occurred in the past. The year 1964 produced 6 major Atlantic hurricanes and 17 major (F scale) tornadoes. Then the year 1965 produced 75 major (F-scale) tornadoes and 1 major Atlantic hurricane. The year 1964 was an extreme year in hurricanes while 1965 was an extreme year in tornadoes.