

04/01/2010 05:00 PM**Climate Catastrophe****Part 6: The Myth of the Monster Storm**

Hurricane Katrina had hardly devastated the southern US city of New Orleans five years ago before a "hurricane war" broke out among US scientists. The alarmists, using the rhetoric of fiery sermons, warned that Katrina was only the beginning, and that we would soon see the advent of superstorms of unprecedented fury. Members of the more levelheaded camp were vehemently opposed to such predictions and insisted that there was no justification for such fears.

The dispute escalated when Kevin Trenberth, a climatologist and a lead author of the IPCC report, announced at a press conference at Harvard University that there was a clear relationship between global warming and the increased intensity of hurricane activity. Chris Landsea, a meteorologist with the National Hurricane Center in Miami, was so furious over this unfounded prediction that he withdrew from his participation in the IPCC.

Now the two rivals have reached a surprising truce, and Landsea has largely prevailed with his reassuring assessment.

Last month Landsea, together with top US hurricane researchers, published a study that finally disproves the supposed link between hurricanes and global warming. The study concludes with the assessment that "tropical cyclone frequency is likely to either decrease or remain essentially the same." Top wind speeds could increase somewhat, says Landsea, but the changes would "not be truly substantial."

Setback for the IPCC

The all-clear signal on the hurricane front is another setback for the IPCC. In keeping with lead author Kevin Trenberth's predictions, the IPCC report warned that there would be more hurricanes in a greenhouse climate. One of the graphs in the IPCC report is particularly mysterious. Without specifying a source, the graph suggestively illustrates how damage caused by extreme weather increases with rising average temperatures.

When hurricane expert Roger Pielke, Jr. of the University of Colorado at Boulder saw the graph, he was appalled. "I would like to discover this sort of relationship myself," he says, "but it simply isn't supported by the facts at the moment."

Pielke tried to find out where the graph had come from. He traced it to the chief scientist at a London firm that performs risk calculations for major insurance companies. The insurance scientist claims that the graph was never meant for publication. How the phantom graph found its way into the IPCC report is still a mystery.

At first, the fear of monster storms seemed easily justified. Scientists conjectured that as the oceans became warmer, hurricanes would accumulate more energy. But, as is so often the case, the truth is more complicated. A specific set of conditions must be present in the atmosphere to allow a hurricane

to develop and survive. "Wind shear can destroy a hurricane in an early stage," says Landsea, who flies into storm cells in research aircraft every year. Wind shear, however, is likely to increase in a warmer climate. For this reason, many computer models now even point to a decline in hurricane activity.

'Nothing Will Change'

Hurricanes have in fact increased since the late 1960s, a phenomenon scientists attribute to a natural cycle in ocean currents. The constantly rising insurance claims reported by reinsurance companies are a particularly unreliable indicator. "When you adjust for the growth in new buildings, road and factories being built in hurricane regions, there is no longer any evidence of an upward trend," Pielke explains.

The prognoses for all storms outside the tropical zone are even clearer. There has been a widespread fear that rising temperatures would lead to more and more powerful storms.

But current long-term forecasts offer no evidence of such a trend, especially not in the temperate latitudes. "All computer models show that nothing will change at all outside the tropics," says Jochem Marotzke, director of the Hamburg Max Planck Institute for Meteorology (MPI-M). "In the future, we will see neither more nor stronger storms gathering over our heads."

In a greenhouse climate, only the storm paths in low-pressure zones are likely to change. There will probably be more wind in Scandinavia and less wind in the Mediterranean region. In Central Europe, on the other hand, no noticeable changes are expected.

It is easy to explain, in physical terms, why stormier times do not lie ahead for most of the world's regions. According to the models, the high latitudes will heat up more substantially than the equatorial zones (which also explains why climate change is already so visible in the Arctic regions). On balance, temperature differences on the Earth's surface will decrease, which in turn will even reduce wind speeds -- meaning the much-feared monster storms are unlikely to materialize.