



RISING TEMPERATURES PRODUCE FIERCER, MORE FREQUENT STORMS.

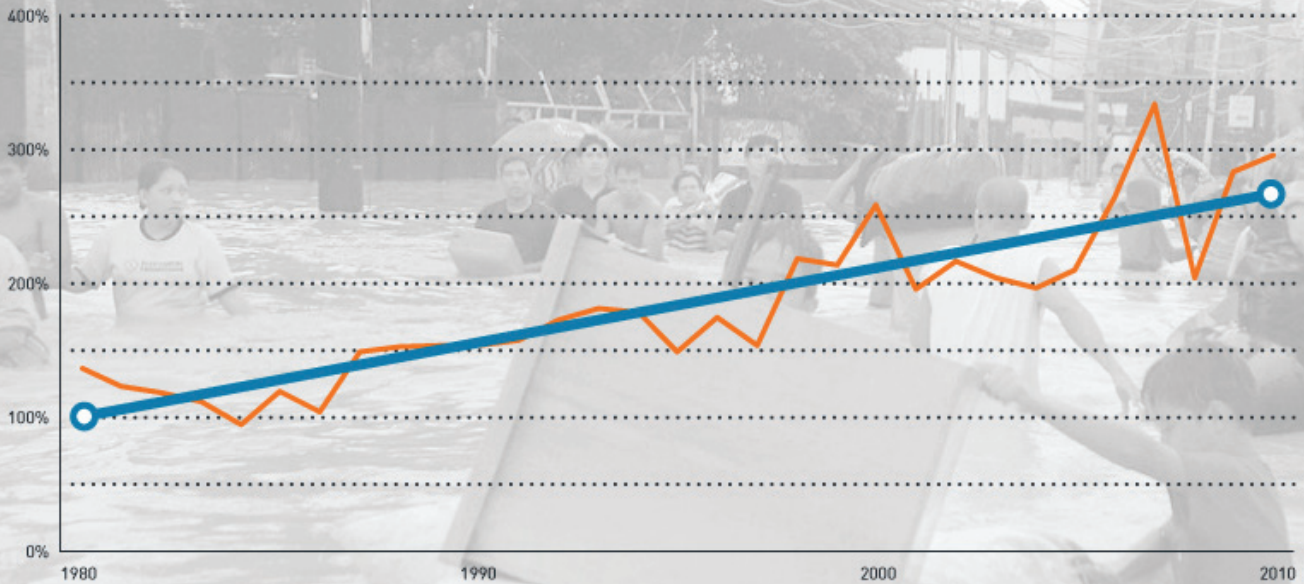
PHILIPPINES

The death toll from the Washi Cyclone that struck on December 15-17 was by far the highest for any tropical cyclone in 2011 with 1249 dead and 79 still missing.



“Every day, every week, another piece of the puzzle falls into place. More extreme weather seems to have become the rule, not just in the U.S. but in Europe and Asia.” Paul Douglas, founder and CEO of WeatherNation

NUMBER OF METEOROLOGICAL EVENTS
Storms with Relative Trend



EXAMPLES:

- In the wettest areas of the tropical oceans, extreme rainfall has increased by 60% with just one degree of warming.²
- In the United States, total average precipitation has increased 7% in the past century, with the number of the most extreme rainfall events increasing by 20%.³
- In May of 2010, Tennessee (U.S.) experienced a “1000 year flood”, in which a record 17.73 inches of rain fell on the state.⁴
- Hurricanes in the Atlantic ocean have become more intense as ocean temperatures have risen, and hurricane season now lasts about 20 days longer than it used to.⁵

WHAT’S IN STORE

A recent MIT study explored how climate change is causing storms to happen more frequently.⁶ Citing New York City as an example, the study suggested that stronger storms, combined with a 3-foot rise in sea level, would turn “100-year floods” into events that could happen every 25 years, with water rising up to 5.7 feet above sea level.

1. http://www.munichre.com/en/group/focus/climate_change/strategy_and_policy/strong_indicator_of_climate_change/default.aspx

2. http://news.cisc.gmu.edu/doc/publications/Allan_Soden%20et%20al.pdf

3. <http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/full-report>

4. <http://thinkprogress.org/climate/2010/05/26/206044/nashville-katrina-tennessee-superstorm-1000-year-flood/?mobile=nc>

5. <ftp://texmex.mit.edu/pub/emanuel/PAPERS/Factors.pdf>

6. <http://web.mit.edu/newsoffice/2012/storm-of-the-decade-0213.html>

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Storms start when low-pressure zones suddenly develop within a high-pressure system. Rising temperatures (one of the symptoms of climate change) create more of these low-pressure zones as the hotter air rises. And on top of that, hotter air can hold more moisture, loading the dice for even more powerful storms.

IN 2010, MUNICH RE (THE WORLD'S LARGEST INSURANCE COMPANY) SAID: "Globally, loss-related floods have more than tripled since 1980, and windstorm natural catastrophes more than doubled... This rise cannot be explained without global warming."

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MORE CO₂
MEANS WORSE
SEVERE STORMS

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