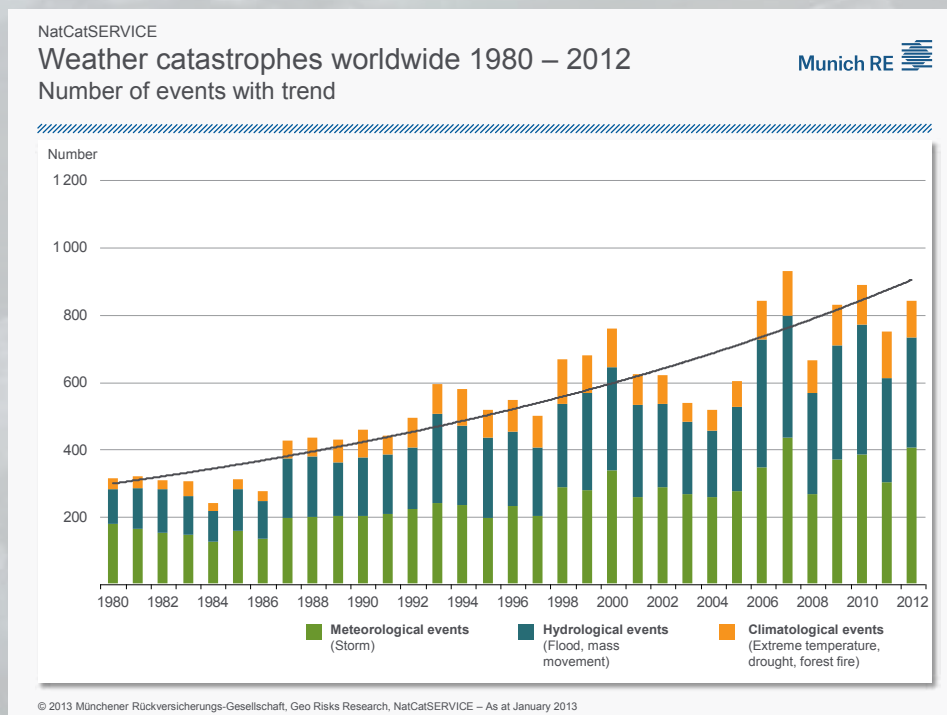


Warming of the Oceans and Implications for the (Re)insurance Industry

The new Geneva Association report *Warming of the Oceans and Implications for the (Re)insurance Industry* provides three main drivers of change in loss potentials:

- **Greater volumes of water, greater risks.** Thermal expansion of the oceans which combined with the melting of continental ice shelves and glaciers has increased global sea levels approximately 20cm over the last century, a rate that is accelerating. Not only do rising sea levels increase the risk of flooding or the potential impact of storm surges, but they also decrease the protective lifespan of coastal infrastructure such as Dutch flood dykes or the Thames barrier. Sea level rise also increases the damage potential from geophysical events because the risk of inundation is greater. Whilst the probability of a tsunami is not increased, the damage caused by one is.
- **Drier dry and wetter wet.** A warmer ocean also means more water in the atmosphere. A warmer atmosphere contains more water and therefore more energy. This has the potential to increase the intensity of extreme events and associated precipitation. This greater intensity increases the loss potential of natural catastrophes.

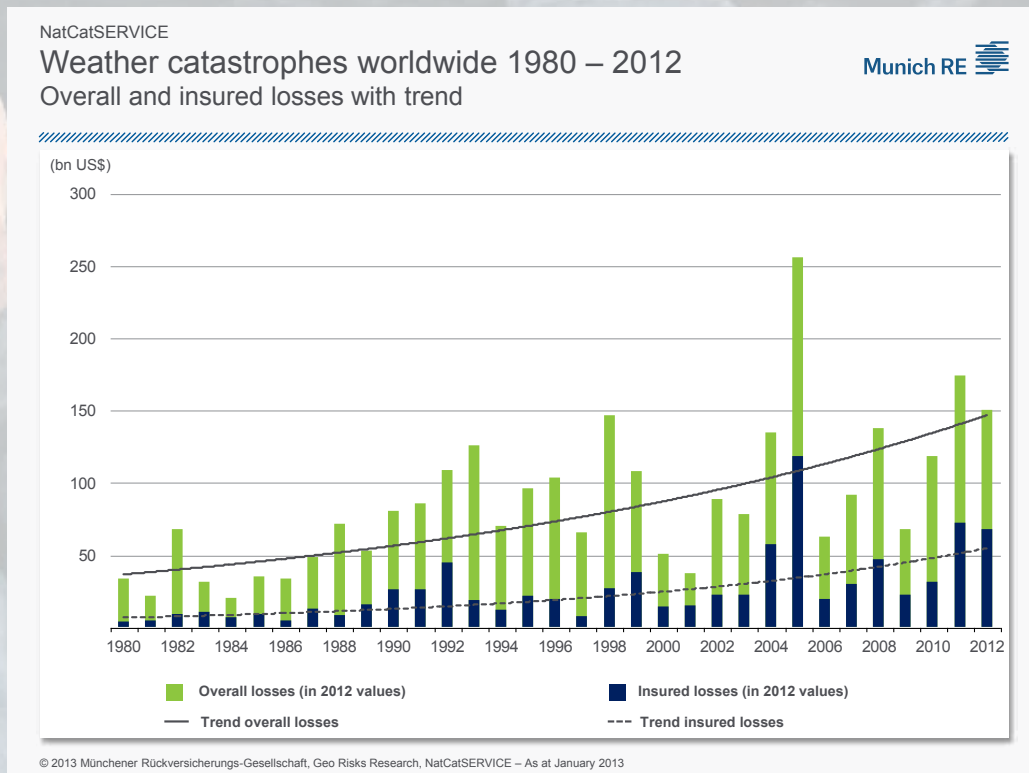


- **Effects on large-scale climate phenomena are likely but currently unknown.** The warming of the oceans is also likely to be affecting the large-scale climate patterns such as El Niño, various monsoon systems or the North Atlantic Oscillation. However due to the long timescales of ocean dynamics and the relatively short length of observational data, the effects of those changes on catastrophic risk are therefore currently unclear.



The report provides two key areas for addressing this challenge:

- Firstly, **insurers need to continue the development of modern means of estimating risk.** The industry is moving away from using stationary climatological approaches for estimating shorter-term risks into using dynamic modelling approaches to estimate time-dependent medium-term outlooks in combination with scenario based approaches, already widely used for long-term assessment purposes. This process should continue and become best practice.



- Secondly, **governments and the private sector need to increase the resilience of communities by managing risks** through a series of means, in particular building resilient infrastructure. See the Geneva Report *Insurers Contribution to Disaster Reduction – A Series of Case Studies*, June 2013.

To download the report [click here](#).

To visit our website section on climate risk [click here](#).

