Weather & Climate Data In Action

The cost of extreme weather events in the U.S. is rising. Data from NOAA's National Centers for Environmental Information provides economic insulation against the impacts of weather-related catastrophes

$3.5 billion

Hail stones the size of baseballs fell on northern Texas in 2016. The storm cost an estimated $3.5 billion in damage

$11 billion

In April 2011 a series of tornado outbreaks in the south east cost $11 billion - the most expensive tornado events in a decade

$154 billion

Hurricane Katrina caused $154 billion of damage. It was the single largest loss event in the history of insurance

$20 billion

A catastrophe costing $20 billion happens on average every 10-12 years

$1.1+ trillion

Combined cost of the billion-dollar weather-related disasters that have hit the U.S. since 1980

The reinsurance sector uses climate and weather data from NCEI in two main ways: as input into catastrophe (CAT) models, and to validate the performance of CAT models

NCEI weather and climate data

Is used to develop catastrophe (CAT) models

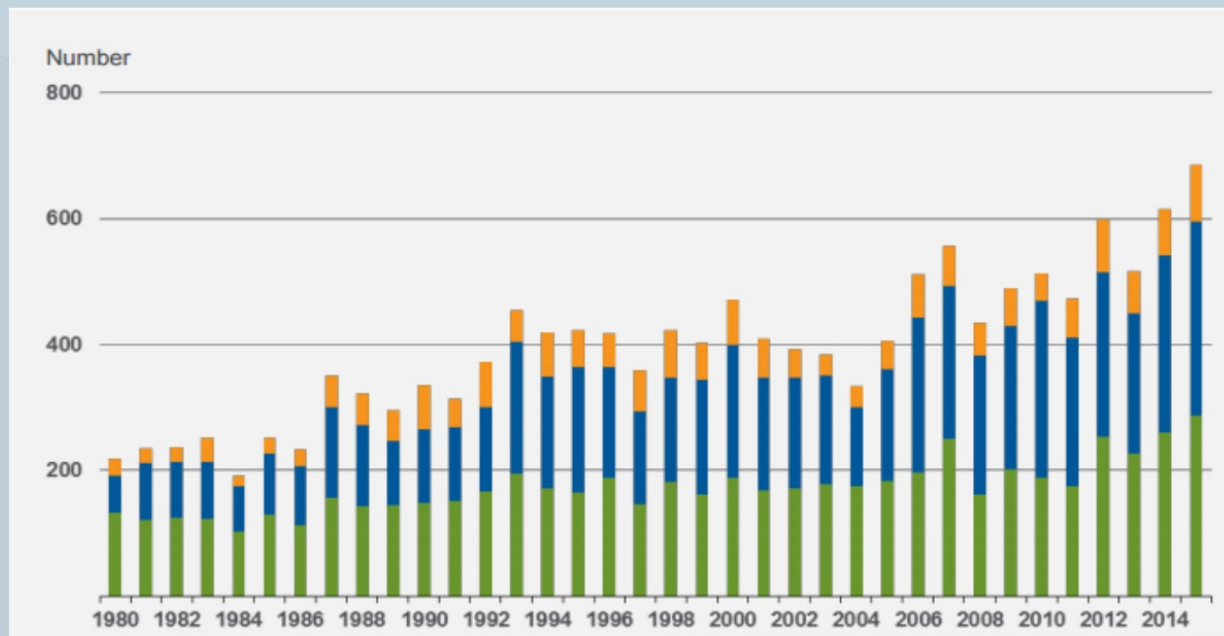
That are used by reinsurers to assess portfolio risk

And enable them to underwrite policies for insurance companys for $60.5 billion

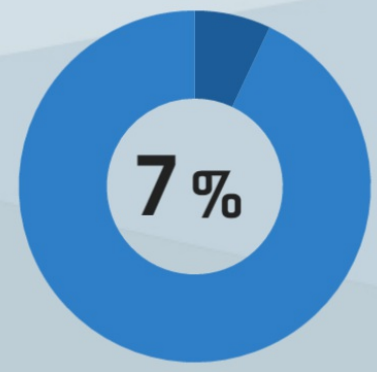
The ability to price risk means that reinsurance can provide a safety net for primary insurance in the event of natural disasters. These sectors protect communities from the economic impacts of extreme weather events time and time again

Weather-related loss events worldwide (1980-2015)

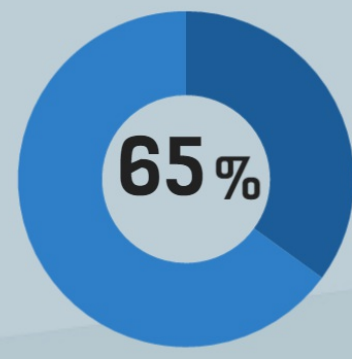
Number of events by peril



350% Weather-related loss events worldwide have risen by about 350% between 1980 to 2015



Finance and insurance are amongst the biggest sectors in the U.S. economy contributing 7% GDP or $1.293 trillion



Reinsurers usually bear around 65% of insured losses when a large natural disaster occurs

Created by: ACCLIMATISE building climate resilience