

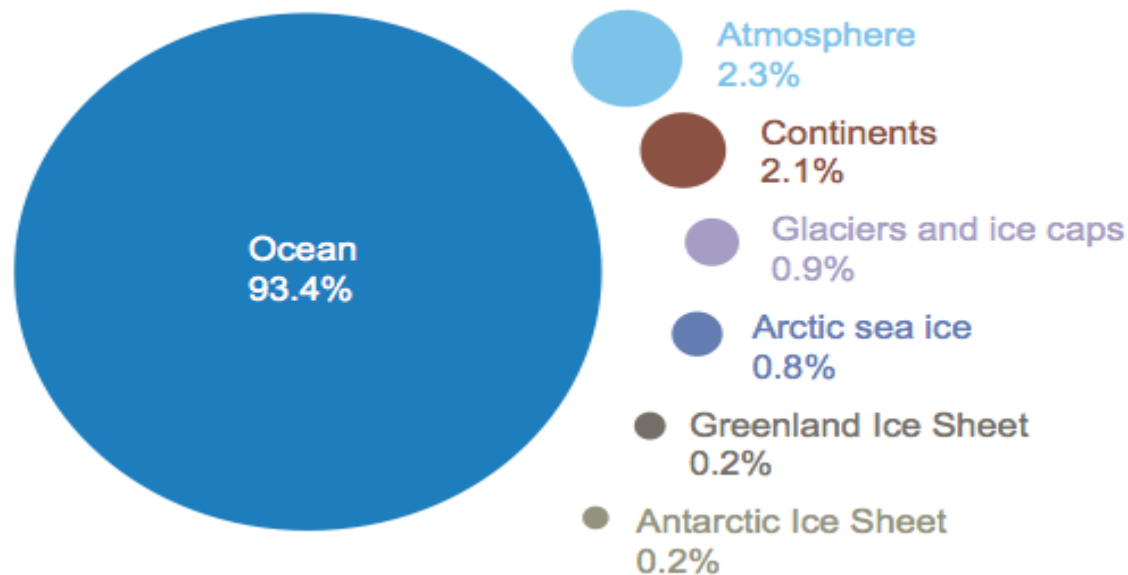
CLIMATE CHANGE: A GAME OF BALANCE

Krassi Lazarova, PhD
Associate Professor of Physics
Centenary University

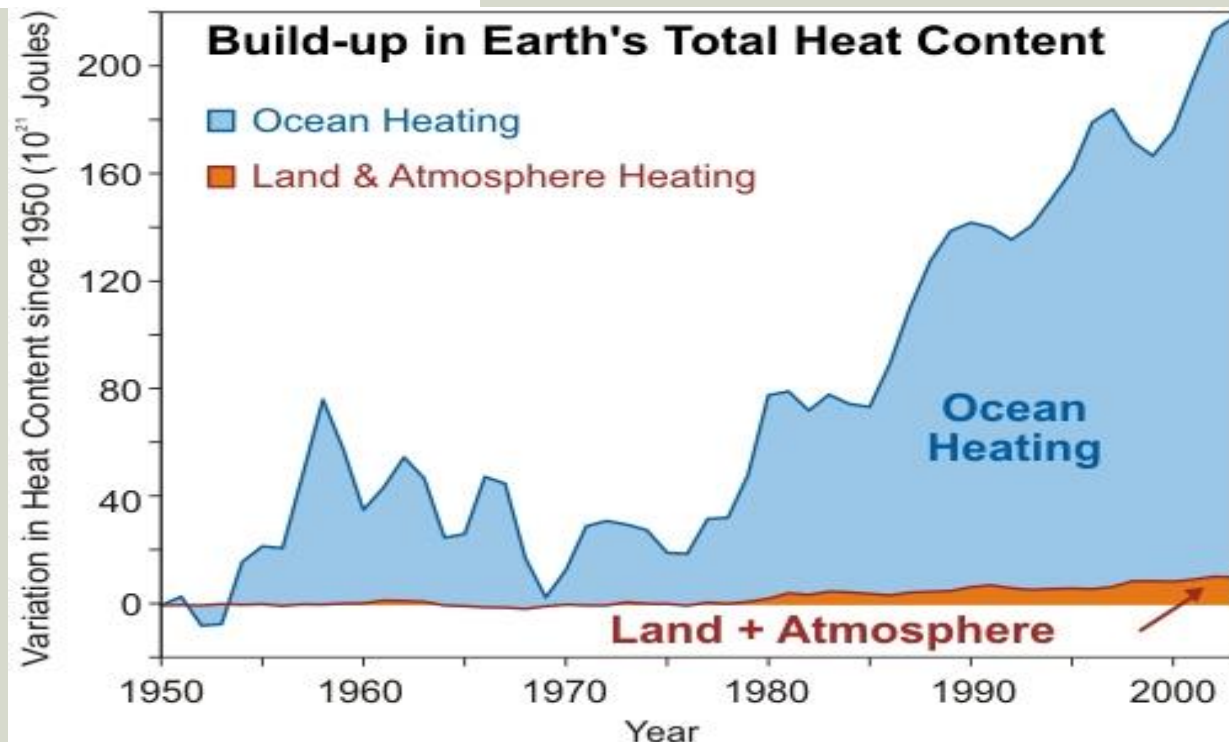
2nd Annual Northwest New Jersey Rivers Conference



Where is global warming going?



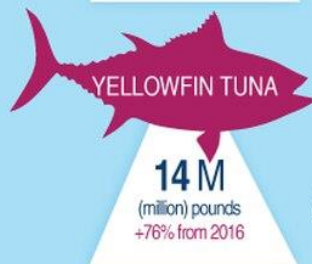
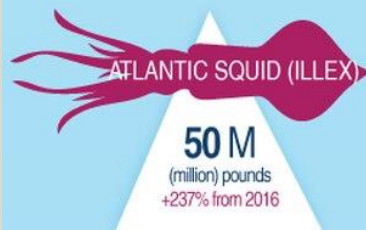
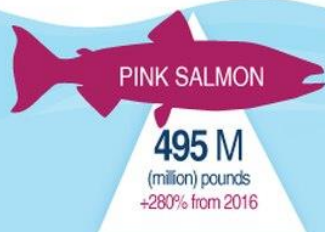
Data from IPCC 2007



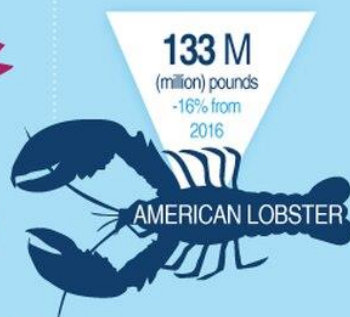
LOCAL EFFECTS - FISHING

2017 U.S. Commercial Fisheries and the Seafood Industry Highlights

Landings Increases



Landings Decreases



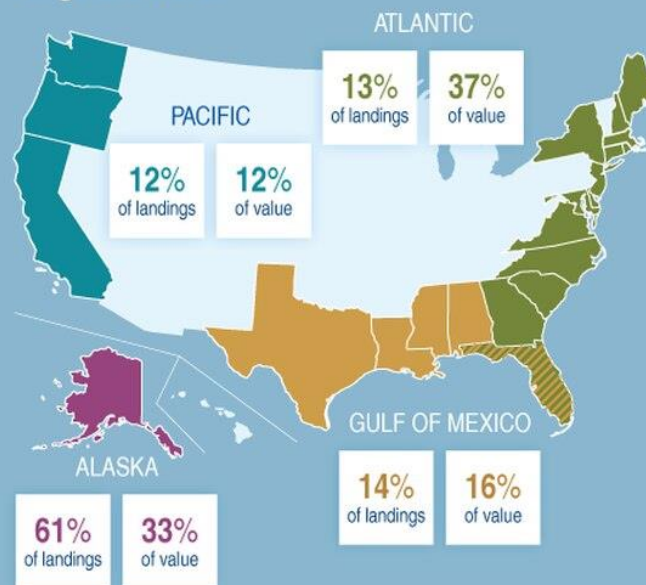
U.S. Totals

LANDINGS **9.9 B**
(billion) pounds
+3.6% from 2016



VALUE **\$5.4 B**
(billion)
+2.1% from 2016

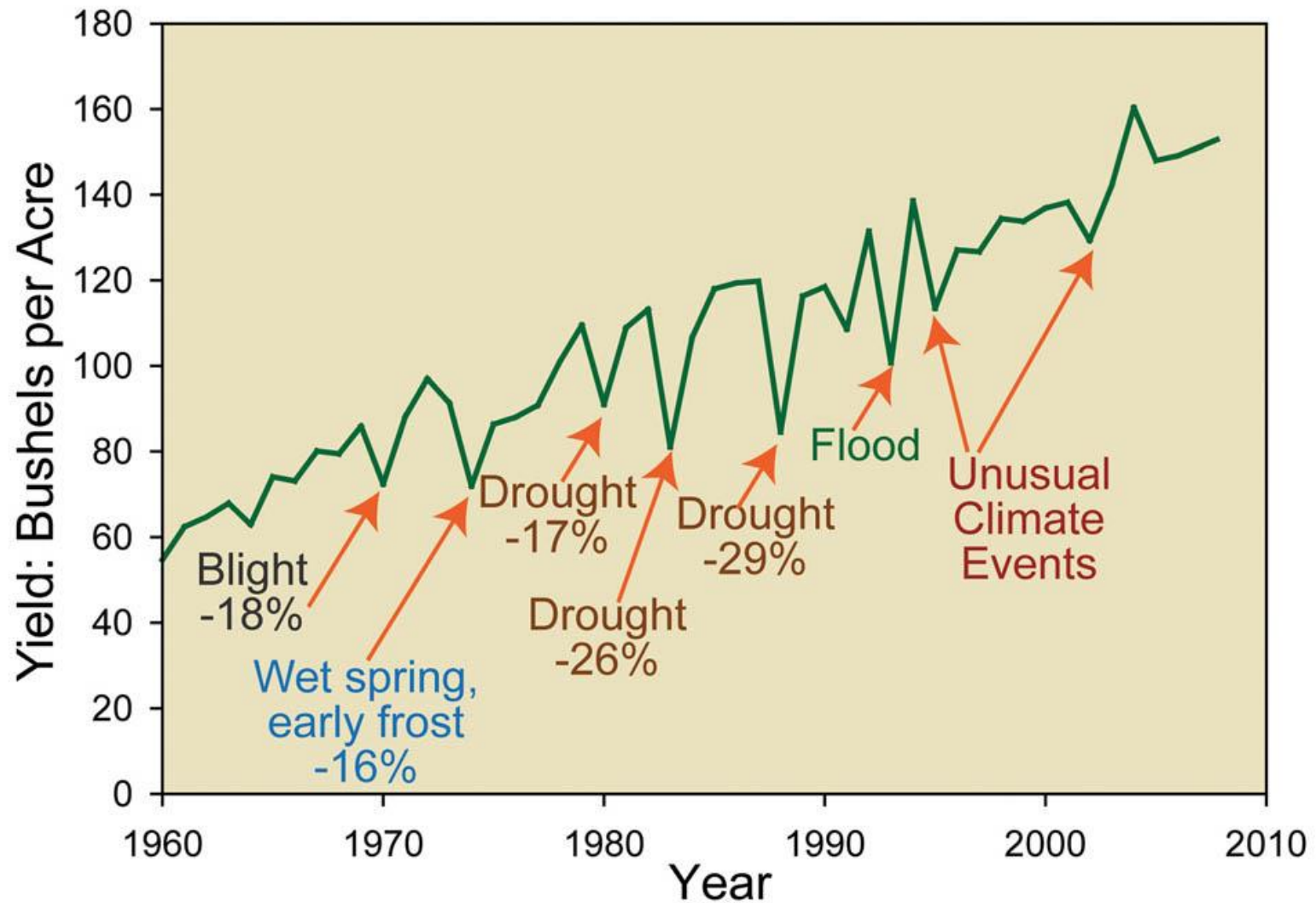
Regional Totals



NOAA FISHERIES

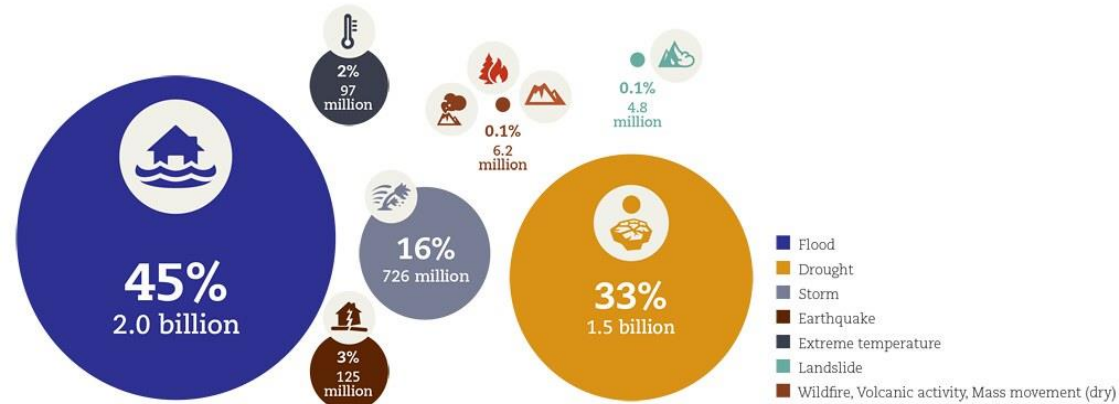
* Hawaii contributed less than 1% of U.S. volume and 2% of U.S. landings value.
The Great Lakes contributed less than 1% of U.S. landings and landings value.

LOCAL EFFECTS - FARMS



DISASTER RISKS

Number of people affected per disaster type 1998-2017



Source: CRED, UNISDR, 2018

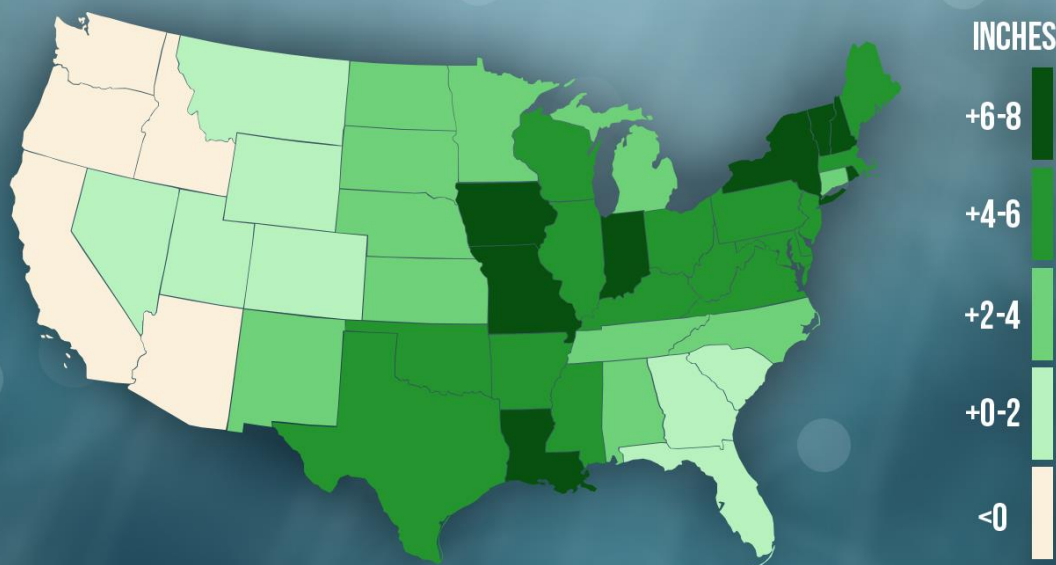
Numbers of disasters per type 1998-2017



Source: CRED, UNISDR, 2018

LOCAL EFFECTS – CHANGING PRECIPITATION PATTERNS

WET GETTING WETTER CHANGE IN ANNUAL RAINFALL SINCE 1950

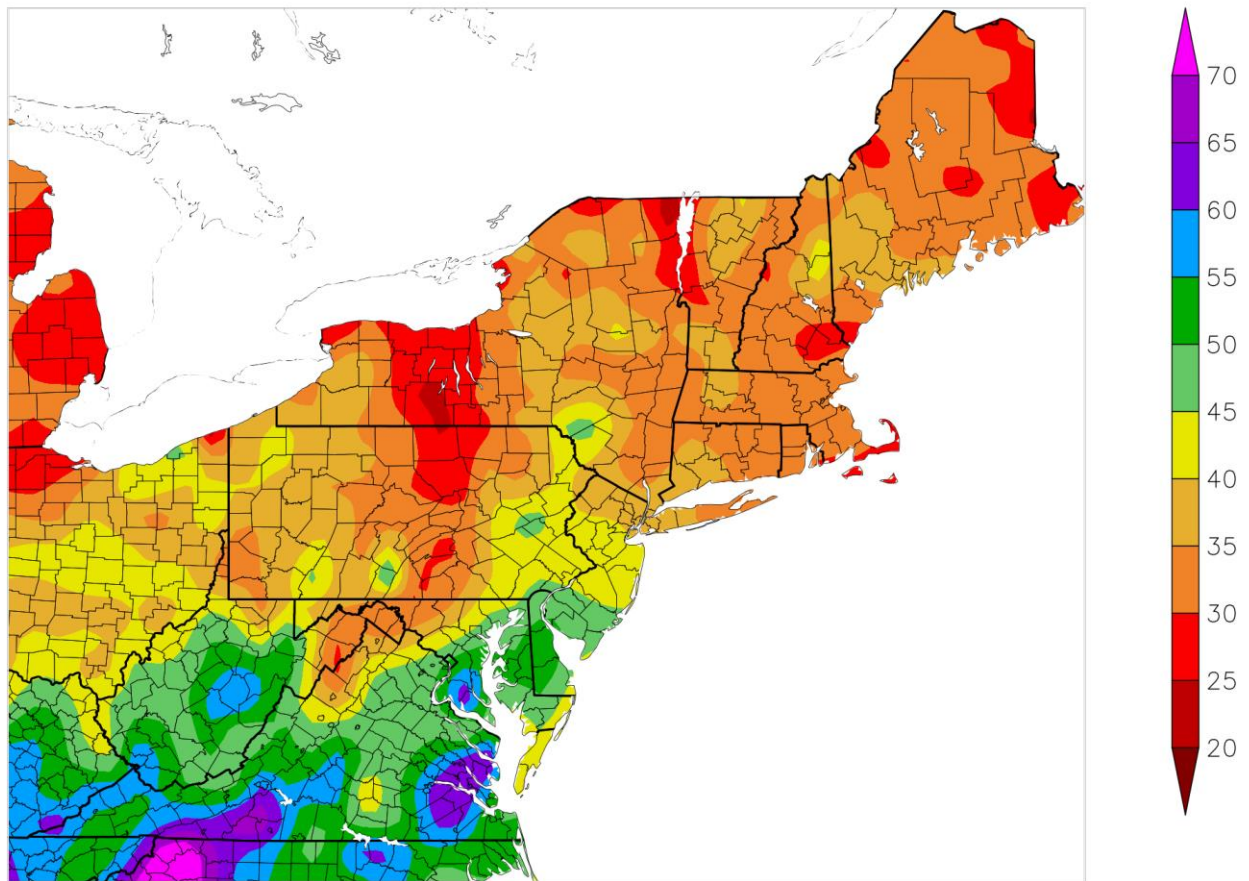


Statewide averages from NOAA NCEI Climate at a Glance. Produced 5/22/2019
Source: NOAA/NCEI Climate at a Glance

CLIMATE  CENTRAL

CHANGING PRECIPITATION PATTERNS

Precipitation (in)
1/1/2020 – 11/7/2020

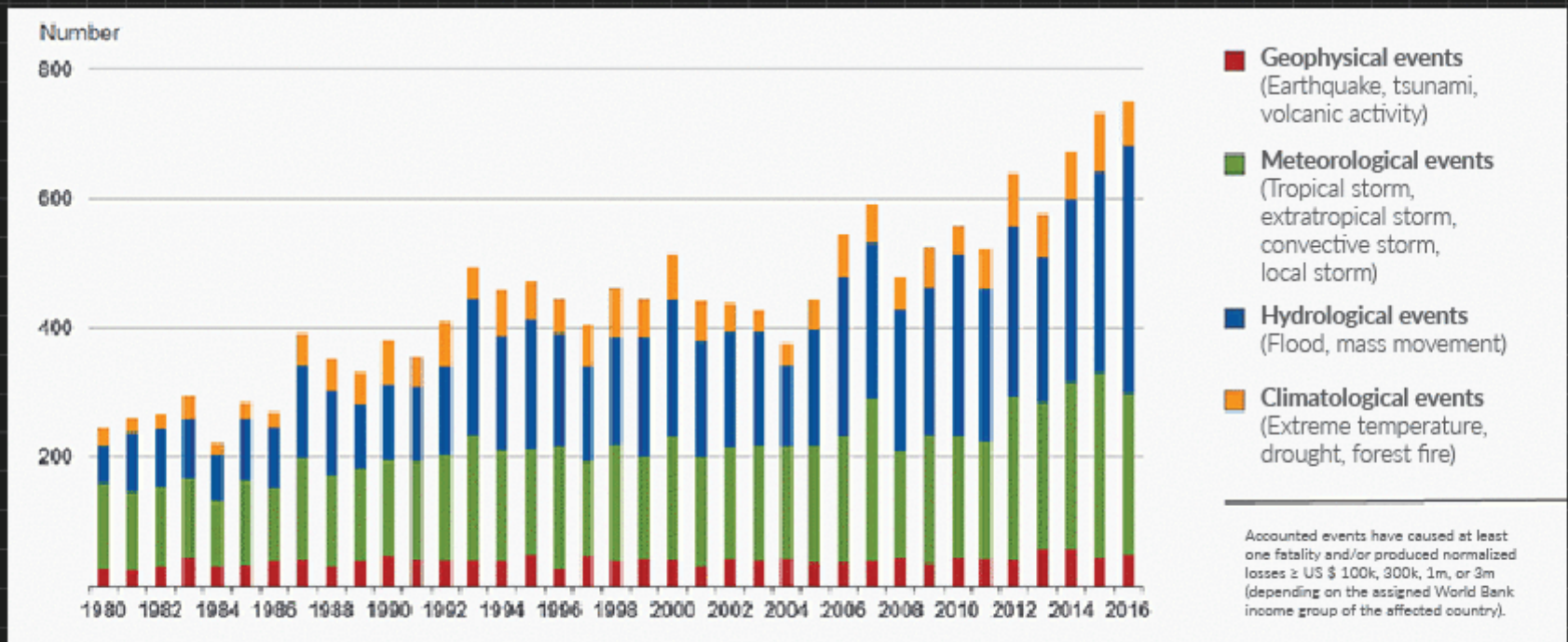


LOCAL EFFECTS – INFRASTRUCTURE

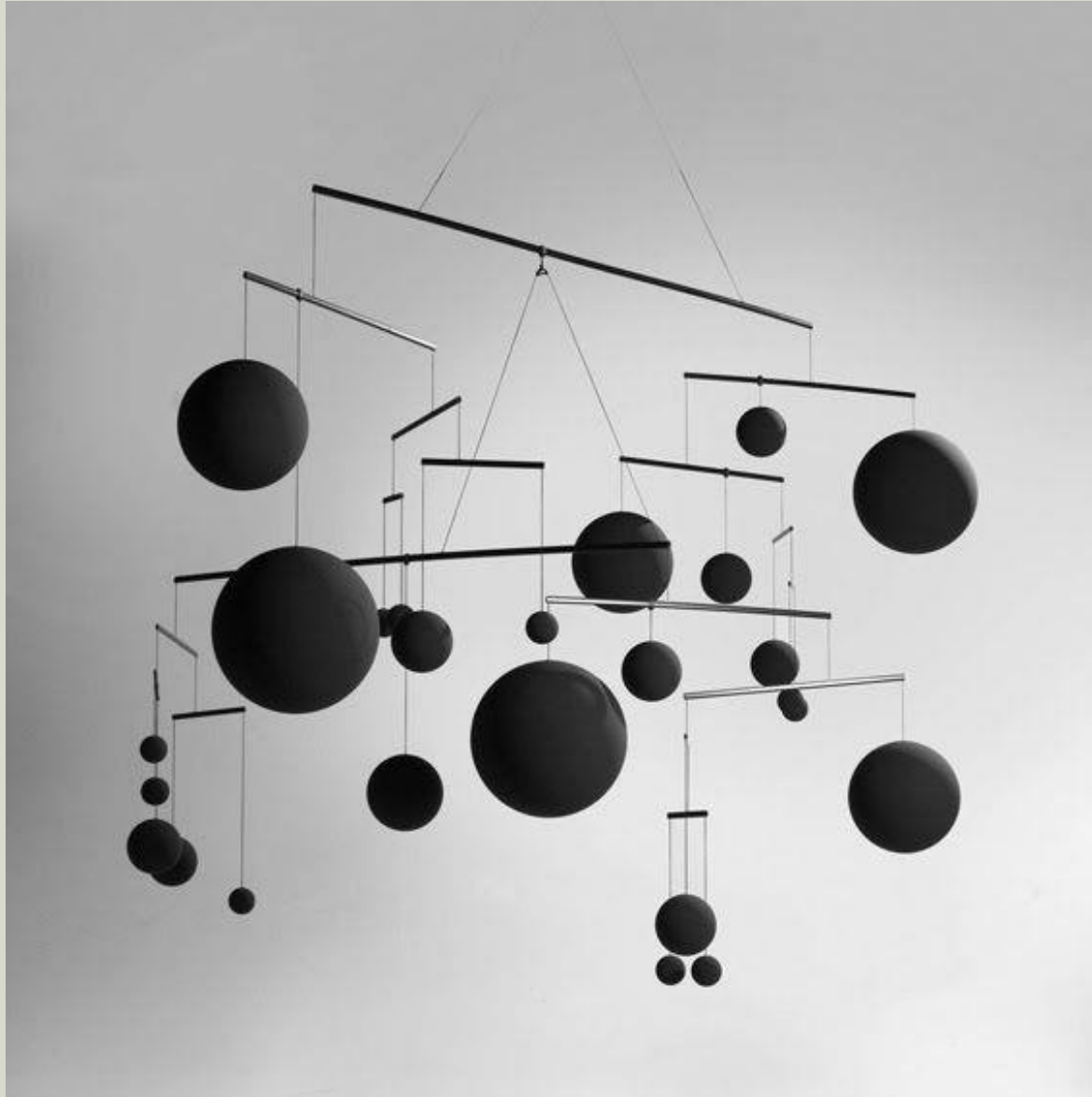
NUMBER OF NATURAL CATASTROPHES GLOBAL 1980–2016



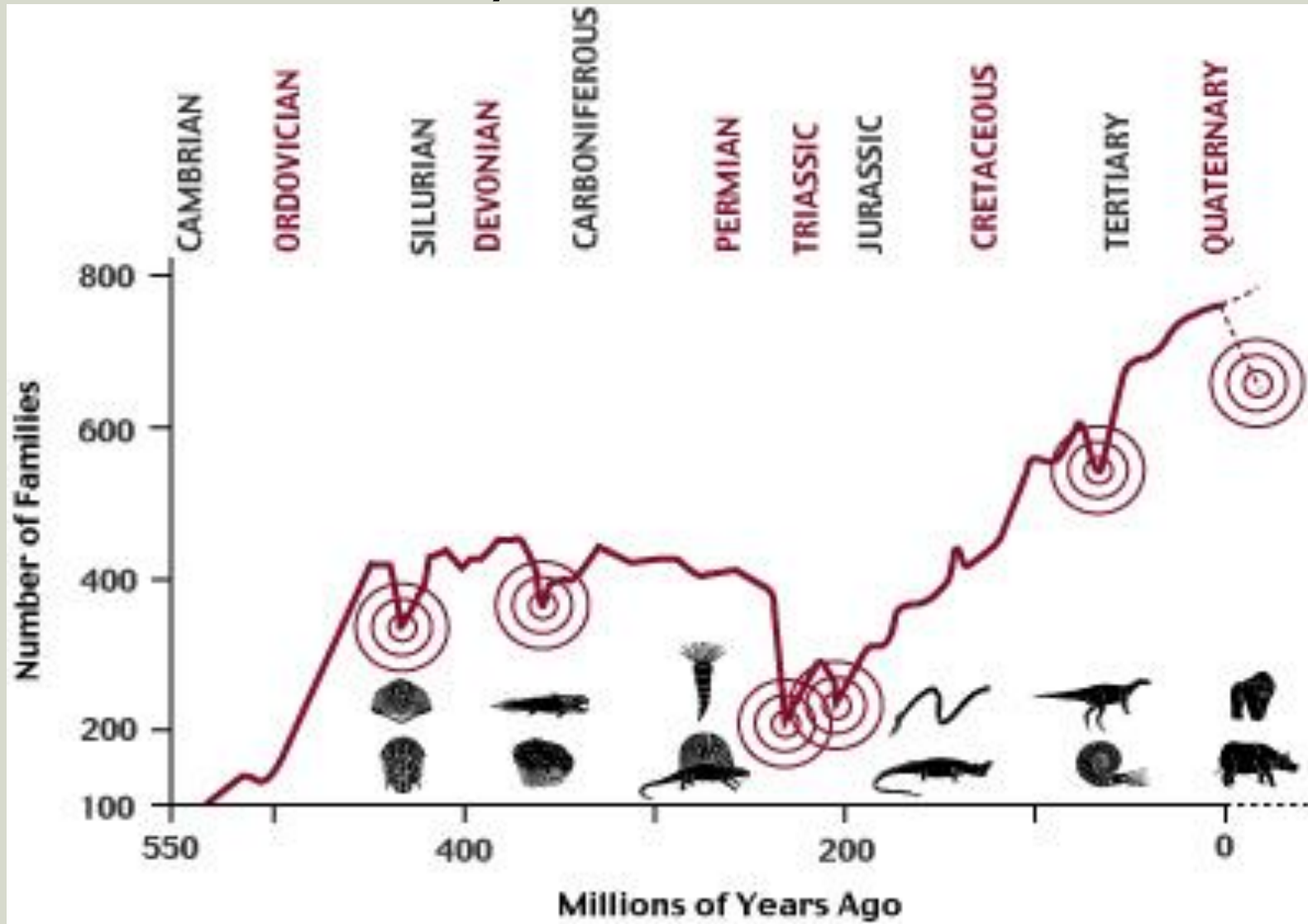
Source: Munich Re, Geo Risks Research



CLIMATE IS A BALANCE OF MANY FACTORS...



Why should we care?



Climate change is an opportunity!

THE HUMAN ELEMENT...

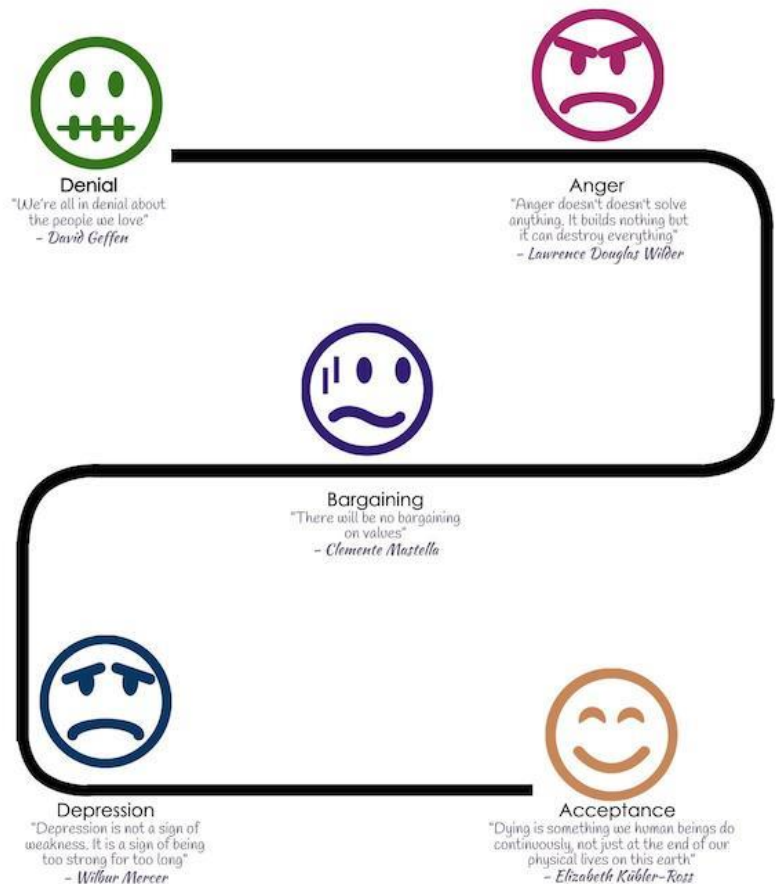
- Denial
- Anger
- Bargaining
- Depression
- Acceptance



5 Stages of Grief

by eClosure

Kübler-Ross Theory





Contact:

Krassi.Lazarova@CentenaryUniversity.edu