

# Climate Change: A Modeling View & Next Steps



**AON**

# Aon (Impact Forecasting) and Columbia University: TC Project

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## Phase 1

Done

Adjustment(s) of current IF  
Atlantic Ocean & Florida-only  
hurricane event set

Results via Columbia's  
CHAZ model output (CMIP 5)

Landfall by category & region

## Phase 2

Late 2021 / Early 2022

Frequency deltas between  
Atlantic & W Pacific event sets  
from IF (base) and Columbia  
(climate change)

Results via Columbia's  
CHAZ model output (CMIP 6)

ATL storm parameter changes

## Phase 3

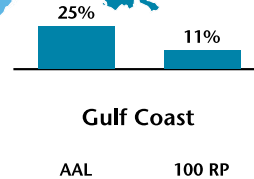
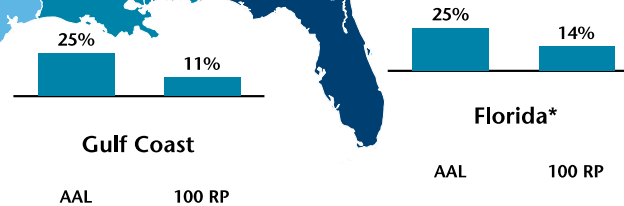
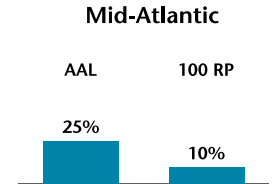
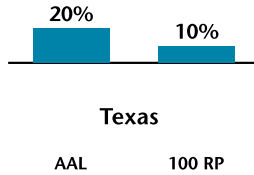
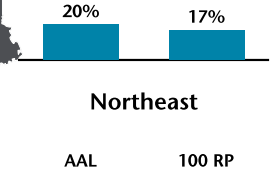
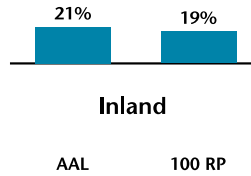
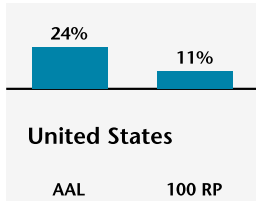
Late 2022 / Early 2023

Detailed storm parameter  
changes in the Northwest  
Pacific Ocean (Japan)

Results via Columbia's  
CHAZ model output (CMIP 6)

New Australia event sets

# Aon (Impact Forecasting) & Columbia University: Phase 1 Results



■ GU "Favorable"  
More Likely to Occur

## Usage Notes

Results: Increase from the current baseline  
Frequency factors based on CMIP 5 output

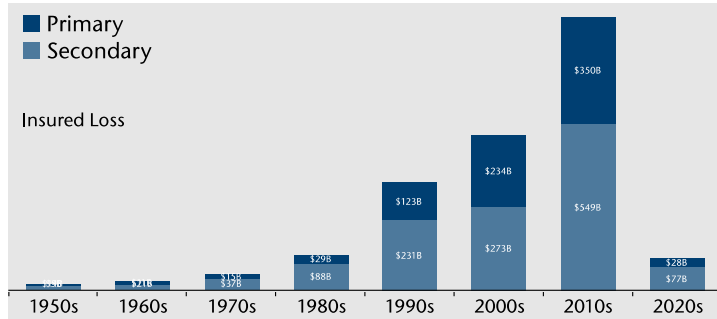
Only accounts for changes to hazard

Current exposure & vulnerability considered in results

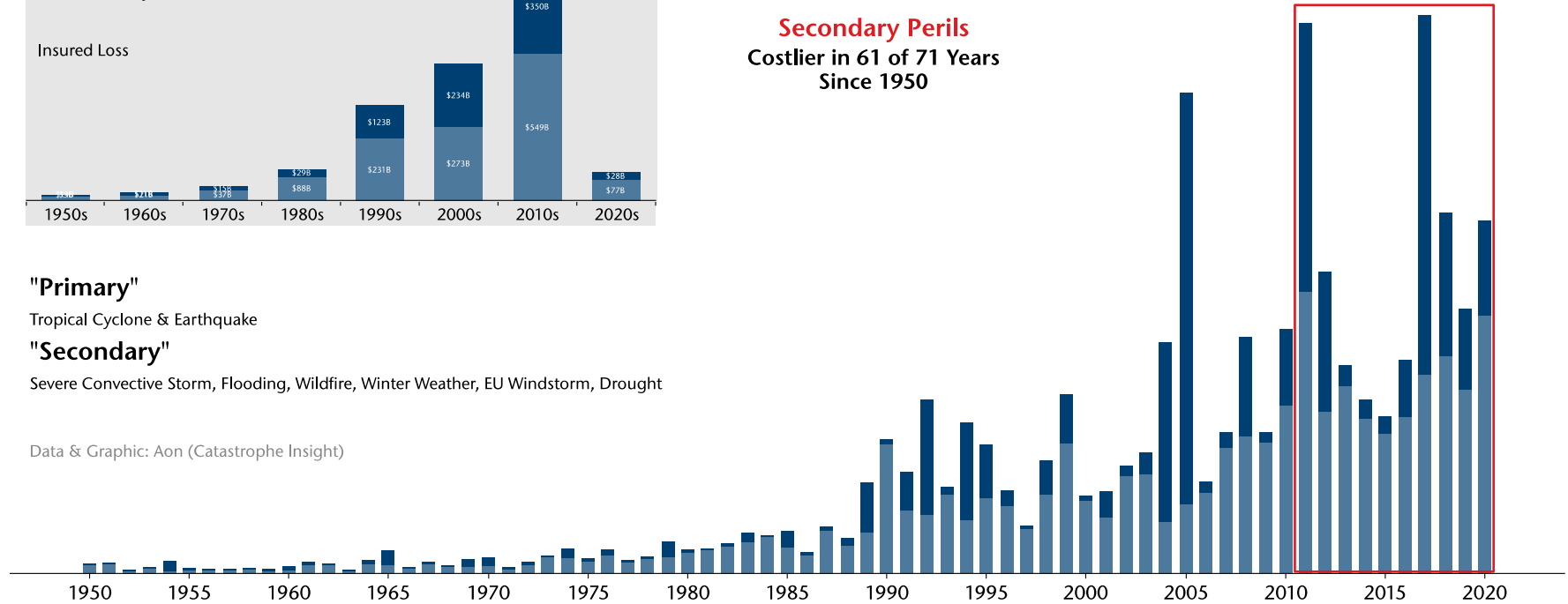
\*Results only applicable to IF Hurricane Model\*

*\*Loss results based on new IF Florida model & FL Hurricane Cat Fund Portfolio  
Non-Florida loss results based on IF U.S. HU Model (v13.5B) & IF IED*

# Weather & Climate Risks Getting Costlier



**Secondary Perils**  
 Costlier in 61 of 71 Years  
 Since 1950



## "Primary"

Tropical Cyclone & Earthquake

## "Secondary"

Severe Convective Storm, Flooding, Wildfire, Winter Weather, EU Windstorm, Drought

Data & Graphic: Aon (Catastrophe Insight)

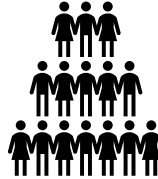
# Climate Change: What the Future Holds

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## Types of Risk

Physical  
Non-Physical (Transition)  
Litigation / Liability  
Supply Chain  
Reputational



## Socioeconomics

Shifting Populations  
  
Food Insecurity  
  
Geopolitical Concerns



## Investment

Spend Money to Save Money  
  
“Building to meet the impacts of yesterday is not a recipe to handle the impacts of tomorrow as event behavior grows more severe.”

# Contact Information

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