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TEAMWORK  
STABILITY  
COMMITMENT  
SERVICE  
STRENGTH  
RESPECT  
HONESTY

## Central States Actuarial Forum

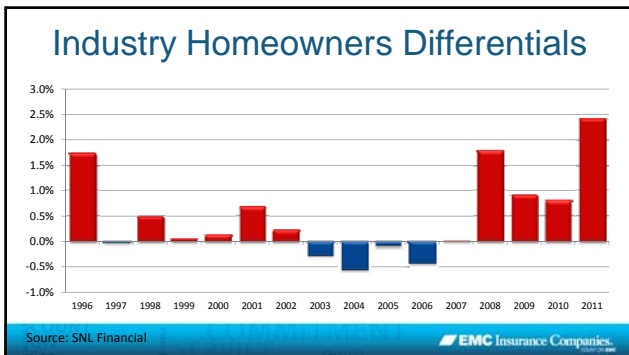
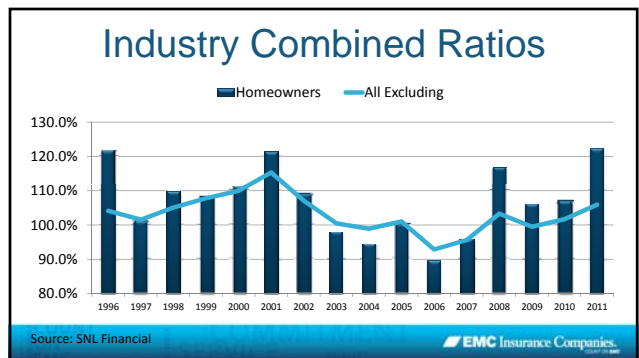
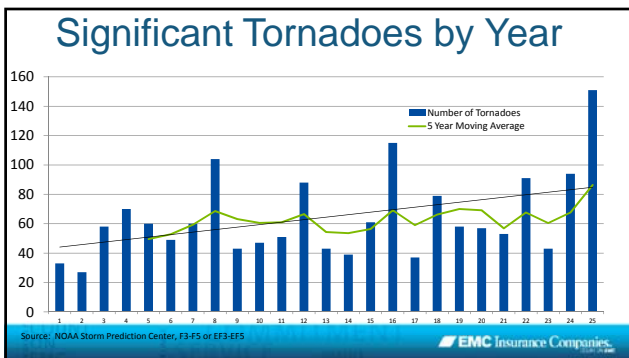
Storm activity - Is there evidence of a long term trend?  
September 27, 2012  
Scott Jean

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## Session Objectives

- Objectively review weather data for insurance relevancy and evaluate usefulness of observed trends
- Avoid political discussion of global warming or climate change
- Recognize human nature to have a short-term memory

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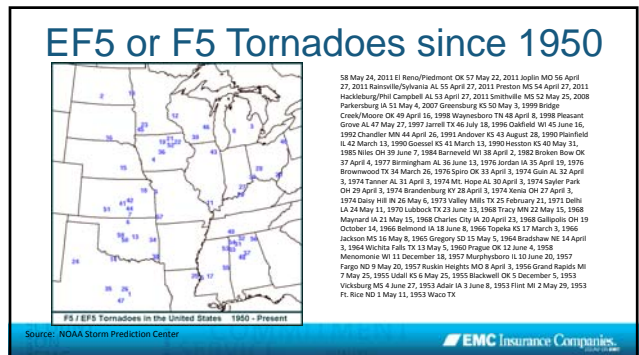
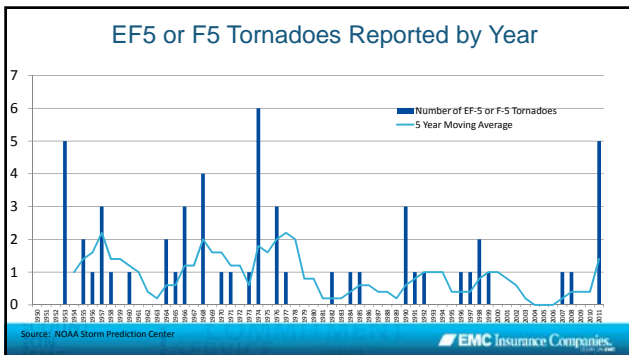
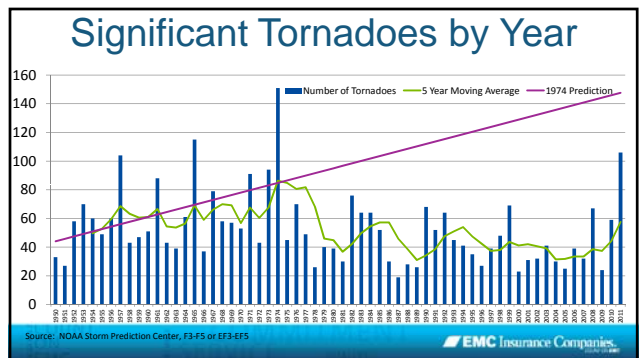
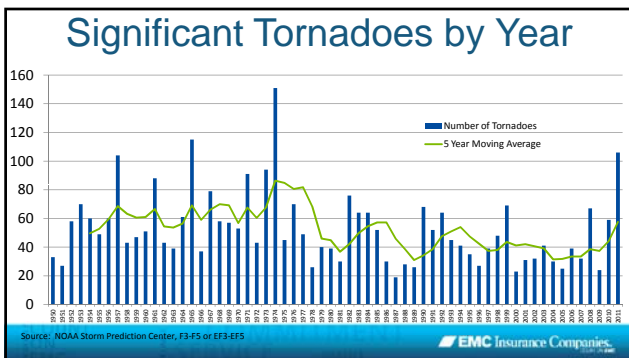
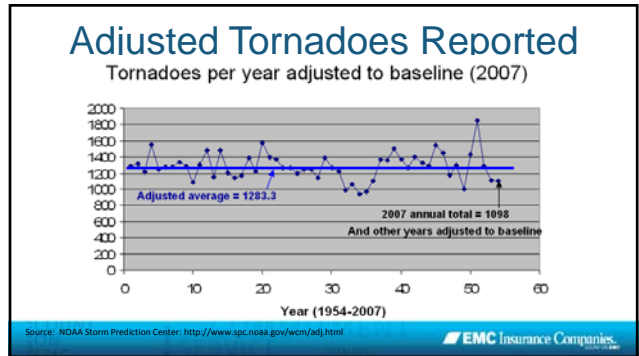
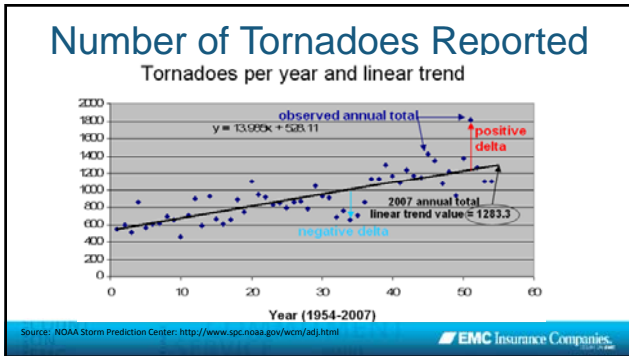


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## Convective Storms

### Tornadoes

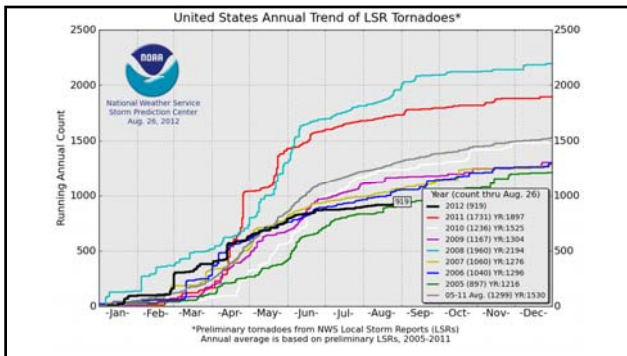
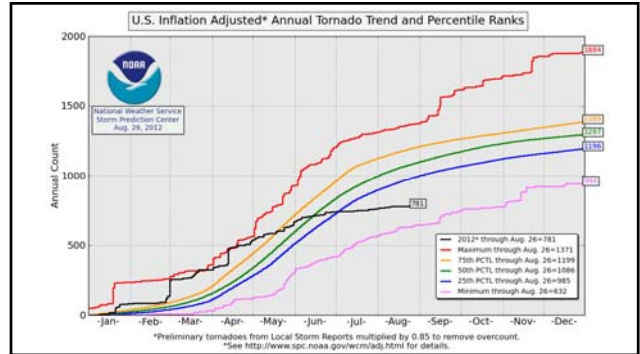
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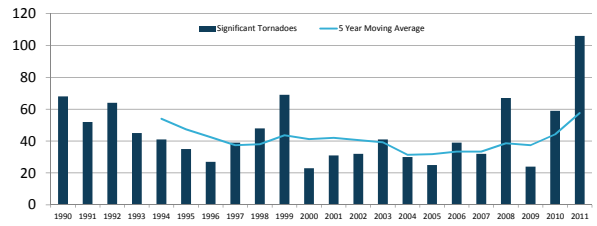
## Top 5 April Tornado Outbreaks

Year	Tornadoes
2011	758
1974	291
2006	258
2009	226
1957	219

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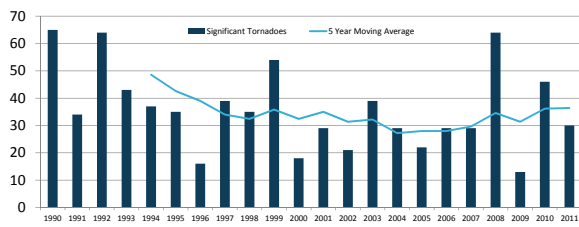
## Significant Tornadoes by Year



Source: NOAA Storm Prediction Center, F3-F5 or EF3-EF5

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## Significant Tornadoes by Year



Source: NOAA Storm Prediction Center, F3-F5 or EF3-EF5

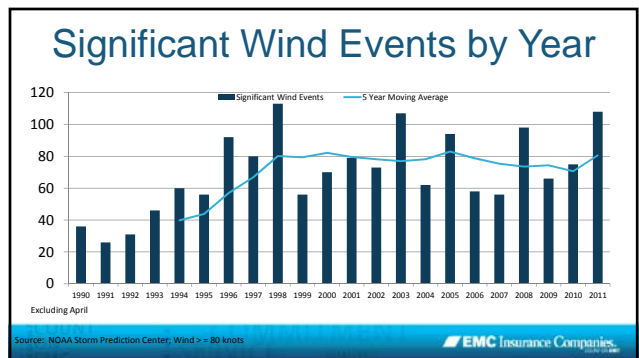
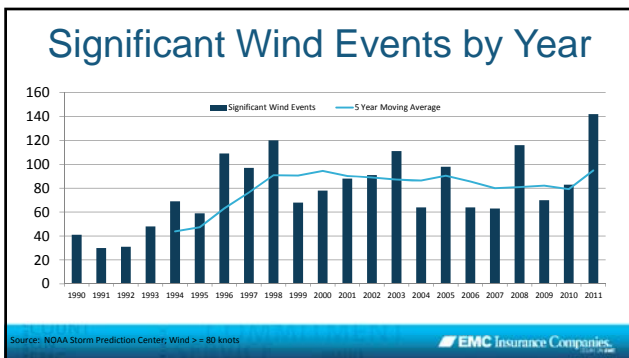
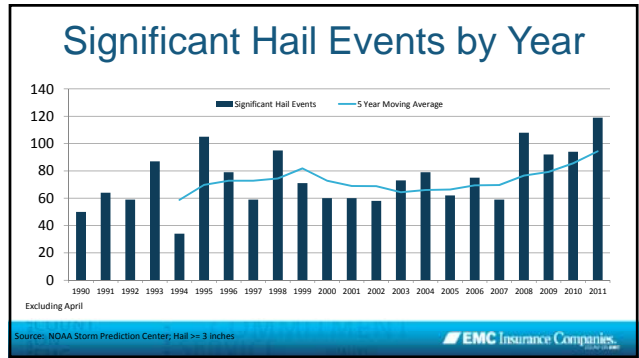
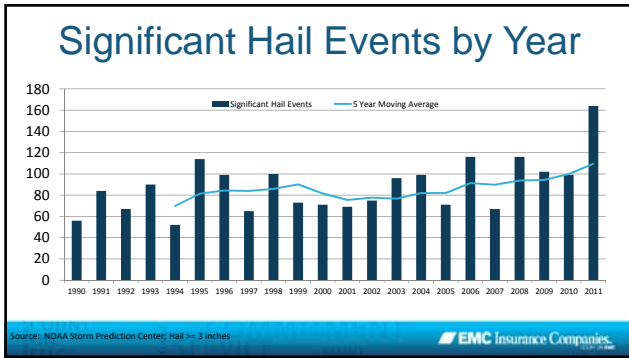
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## Convective Storms

Hail and Wind

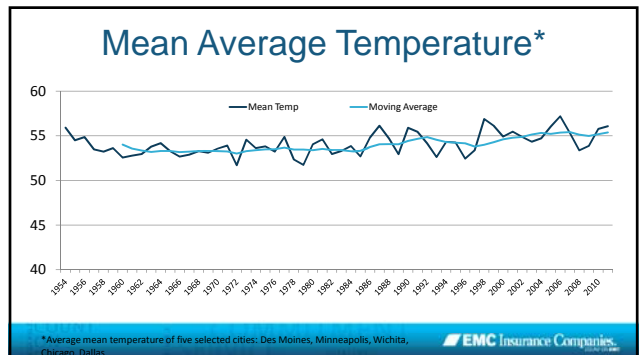
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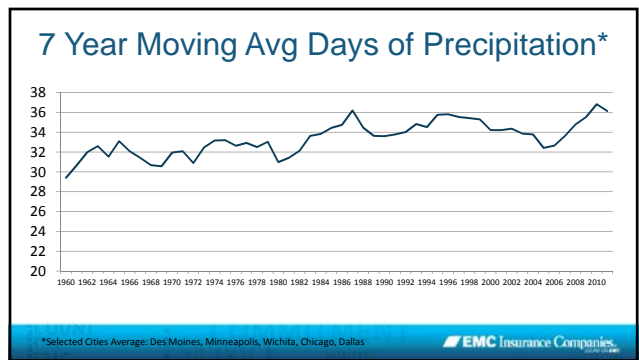
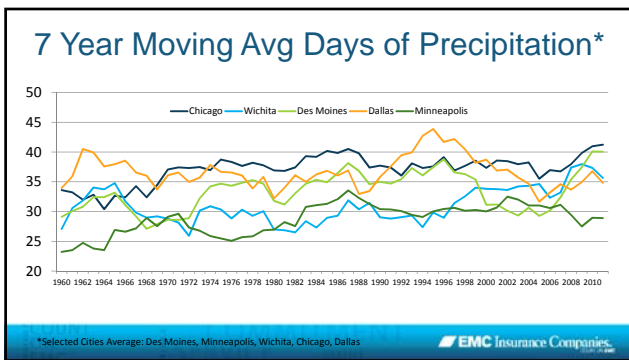
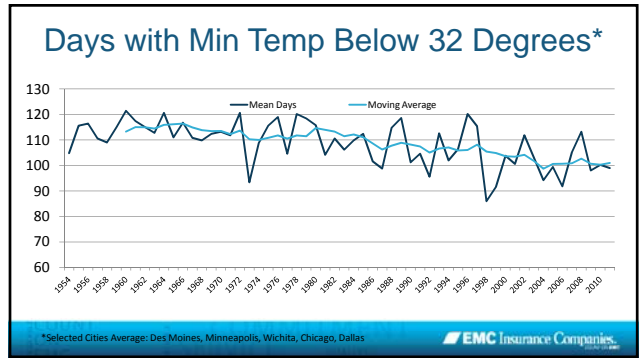
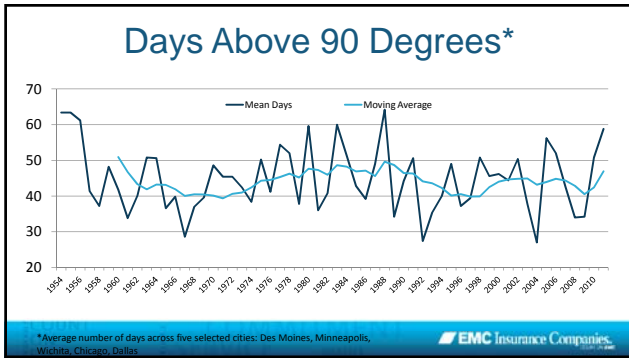


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## Historical Weather Data

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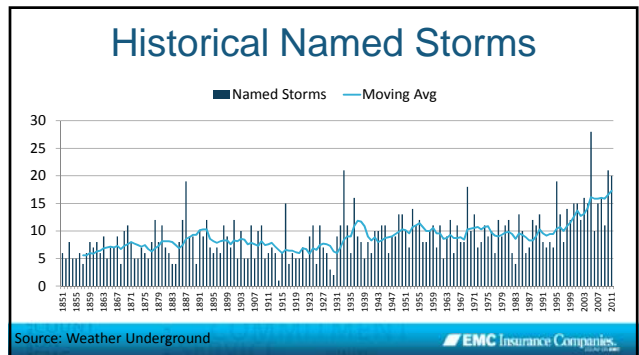


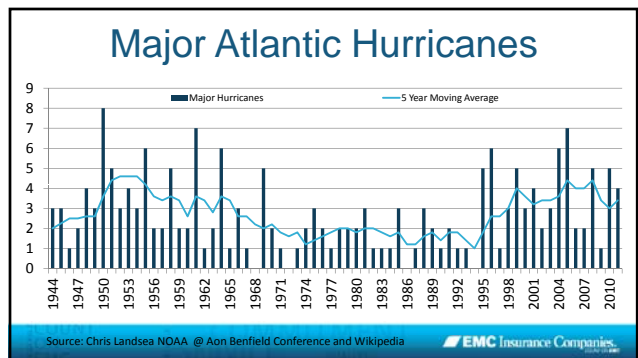
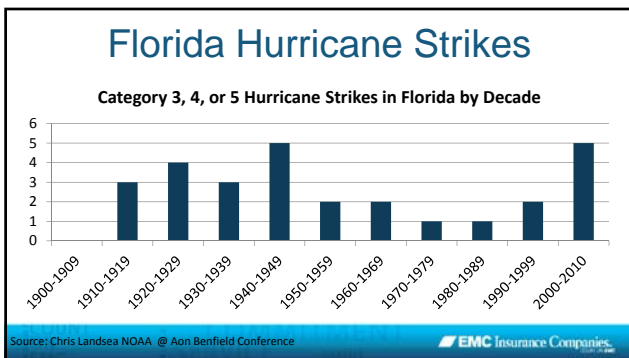
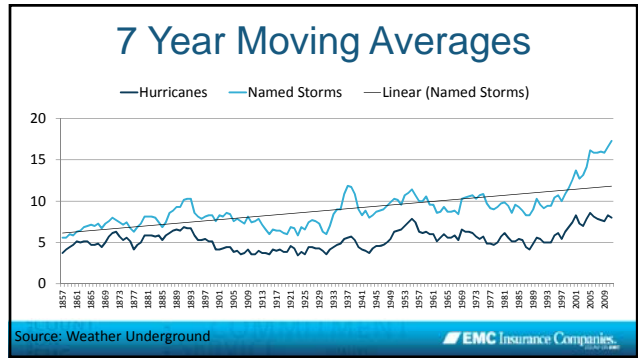
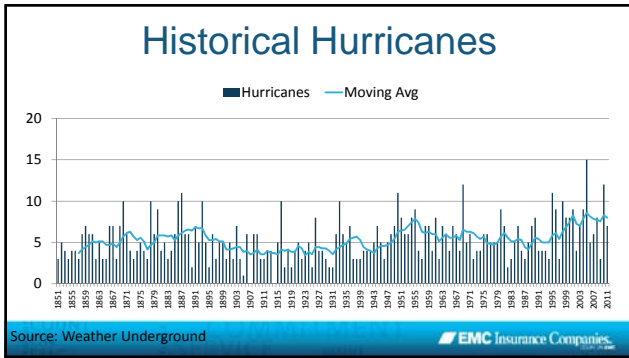


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## Hurricanes

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- ### Why Increases in Insured Losses?
- Recent active weather period
  - Population changes
  - Economy
  - Stormchasers
  - The new norm?

- ### Key Points for Actuaries
- Have a long-term memory
  - Stay abreast of the ever-changing marketplace and modify product offerings as necessary
  - Use caution when using historical data to forecast the future

