

Joint UNECE-UNCTAD Workshop:

# **Climate Change Impacts on International Transport Networks**

08 September 2010, Geneva

## **Climate Change and transportation: the scientific basis**

Presentation by

Mr. Martin Beniston  
University of Geneva

# Climatic change and transportation: the scientific basis

Martin Beniston  
University of Geneva  
*Martin.Beniston@unige.ch*

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## Overview

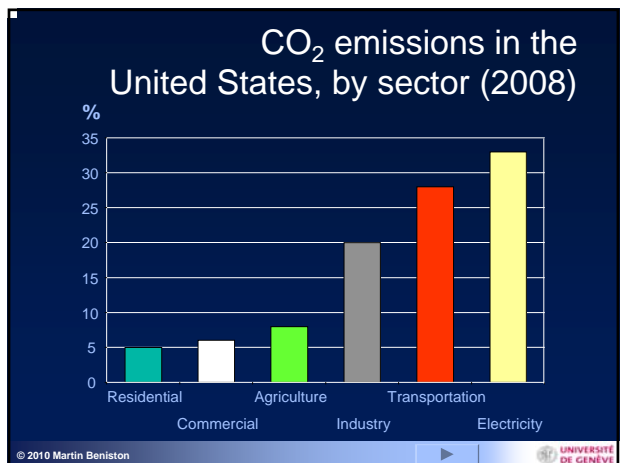
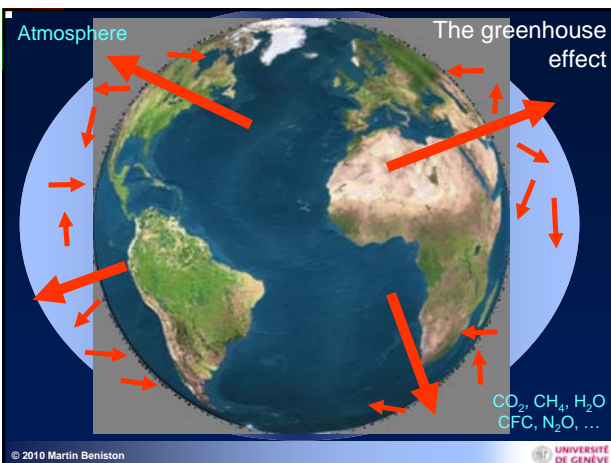
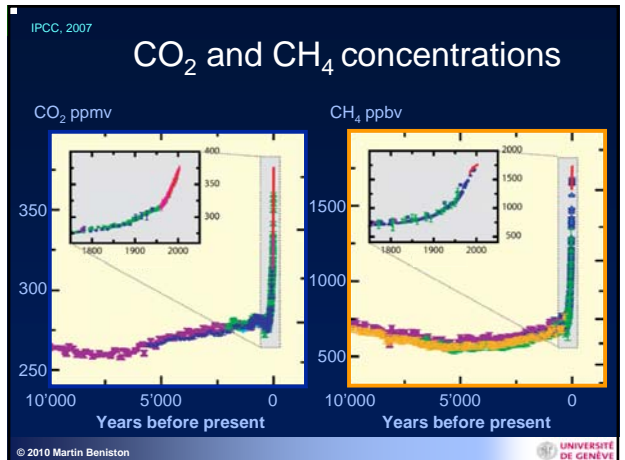
- Anthropogenic climate change
- Climate projections to 2100
- Impacts relevant for the transport sector
- Conclusions

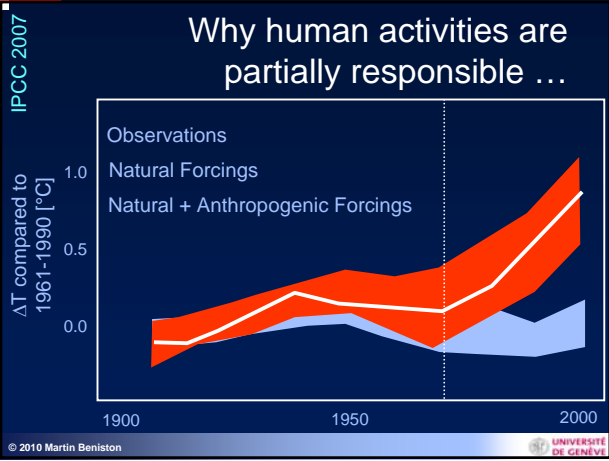
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# 1

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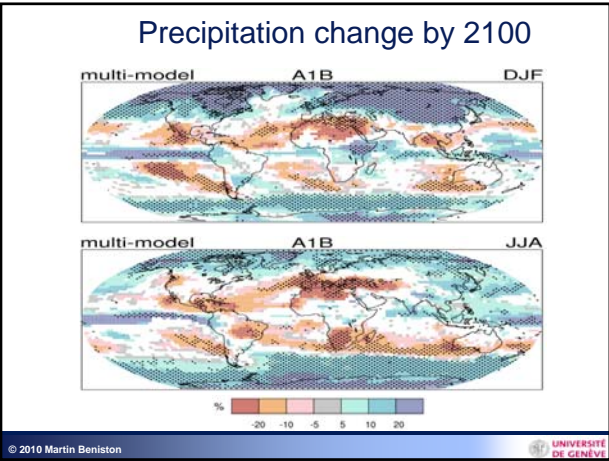
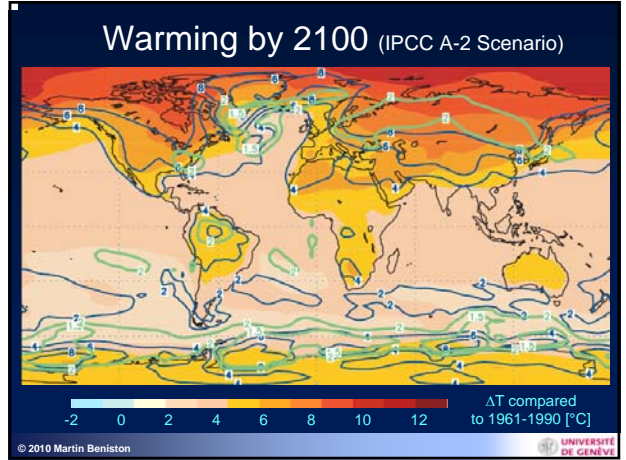
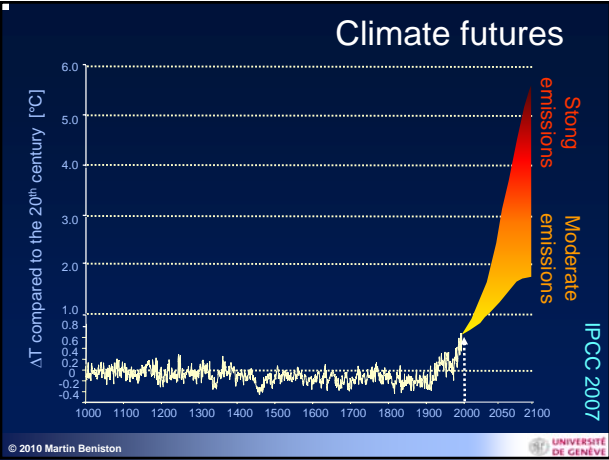




# 2

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# 3

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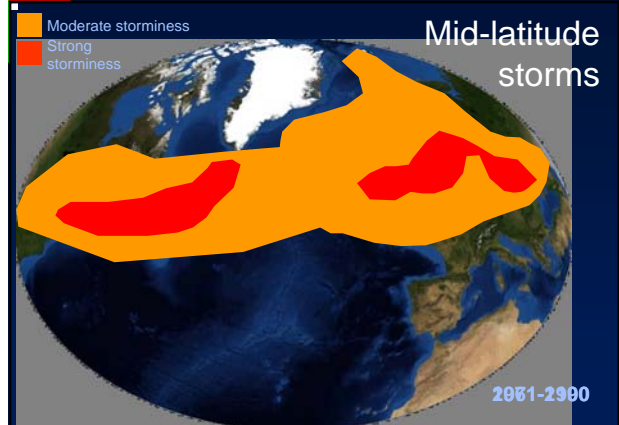
## New coastal geography in the US Gulf States: sea-level rise and storm surges



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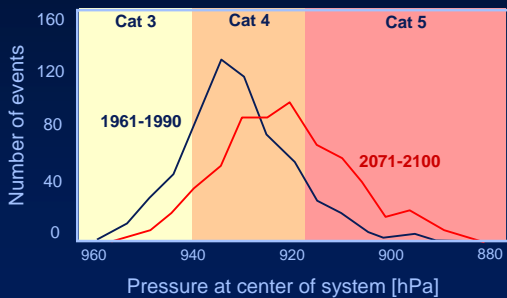
## Mid-latitude storms



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## Tropical storms



K. Emanuel, Science, 2005

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## New navigation routes in the Arctic



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# 4

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## Outlook for the transport sector

- Transport is particularly sensitive to extremes of weather that could increase in a future, warmer, climate
- Positive changes can also be anticipated, such as longer periods without frost or snow that today often lead to disruptions and accidents
- The evolution of the transportation sector is highly dependent on changes in other sectors of the economy
  - ◆ As a result, climate impacts on transportation may be less important than structural changes in transportation systems in the future

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# Climatic change and transportation: the scientific basis

MANY THANKS FOR  
YOUR ATTENTION!

*Martin.Beniston@unige.ch*  
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