

*An Overshoot Scenario:
Don't pay now but pay big time later*

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Overview

- Mitigation versus adaptation...if we do nothing about emission then it is adaptation
- Should we overshoot?

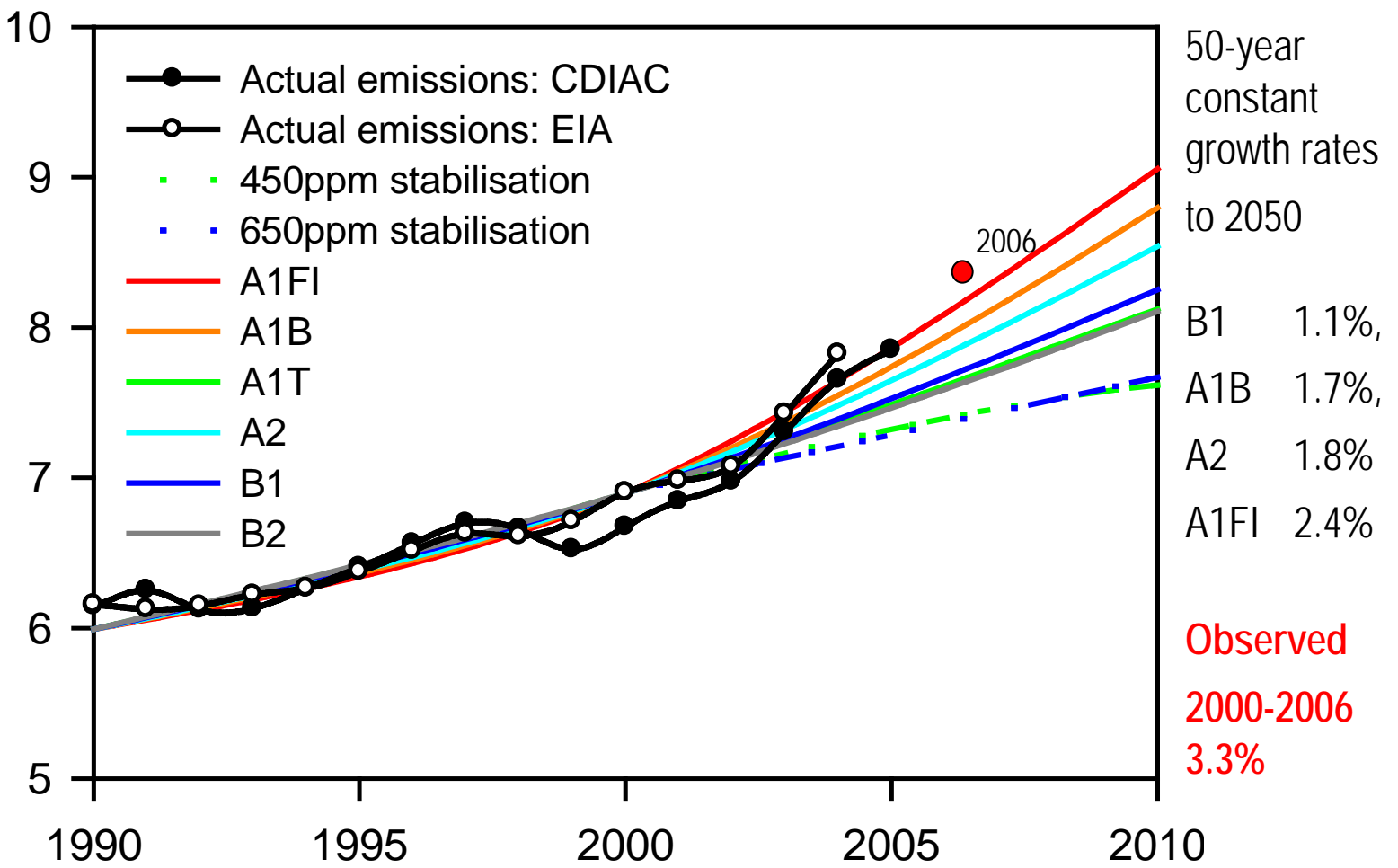


Low Emission Future Climate Change Simulations

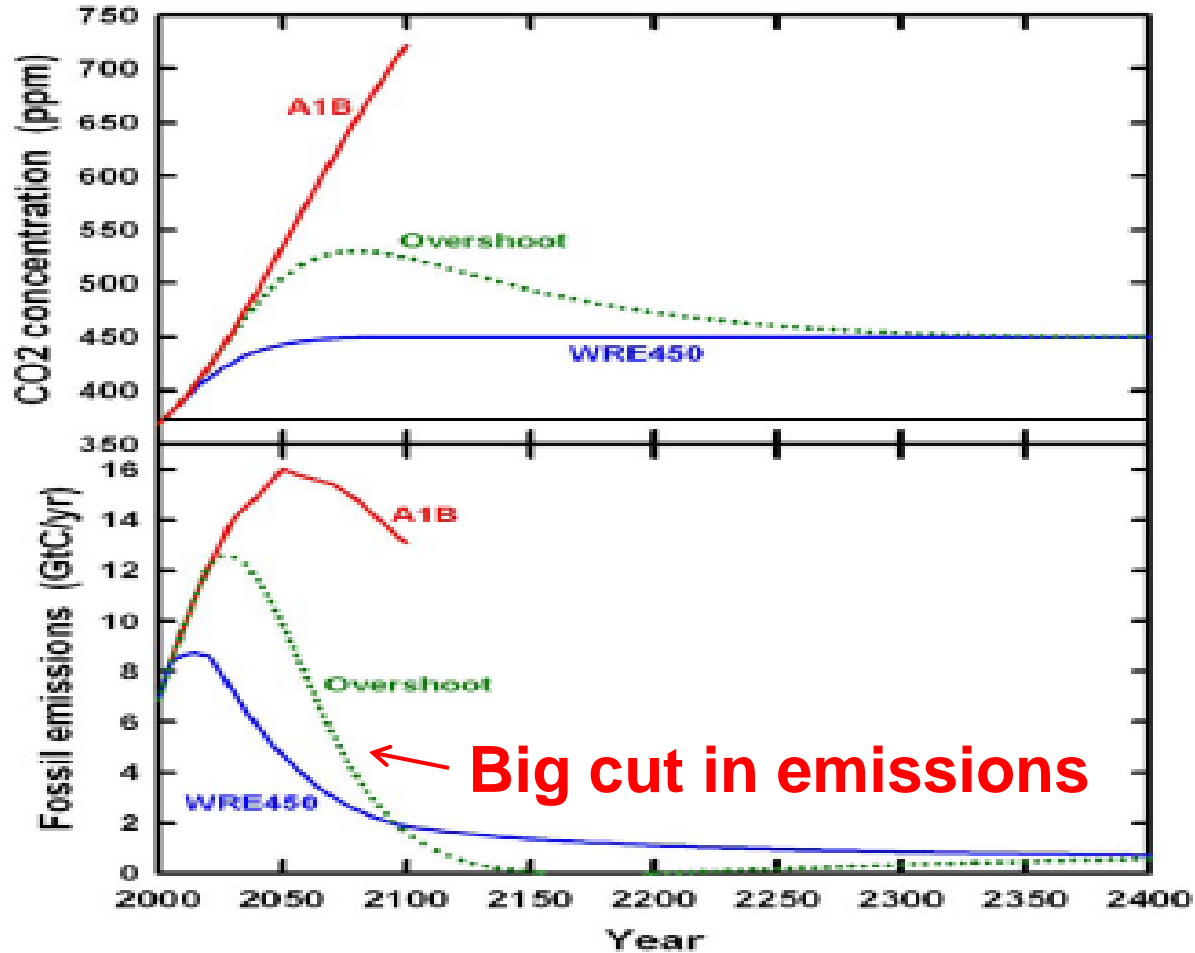
- Can we stabilize global warming using the new CCSP Report 2.1a scenarios?...Yes... but sea level keeps rising
- Can we limit global warming to 2°C from years 1870 to 2100?...Yes
- Is there another way... Yes...the overshoot!



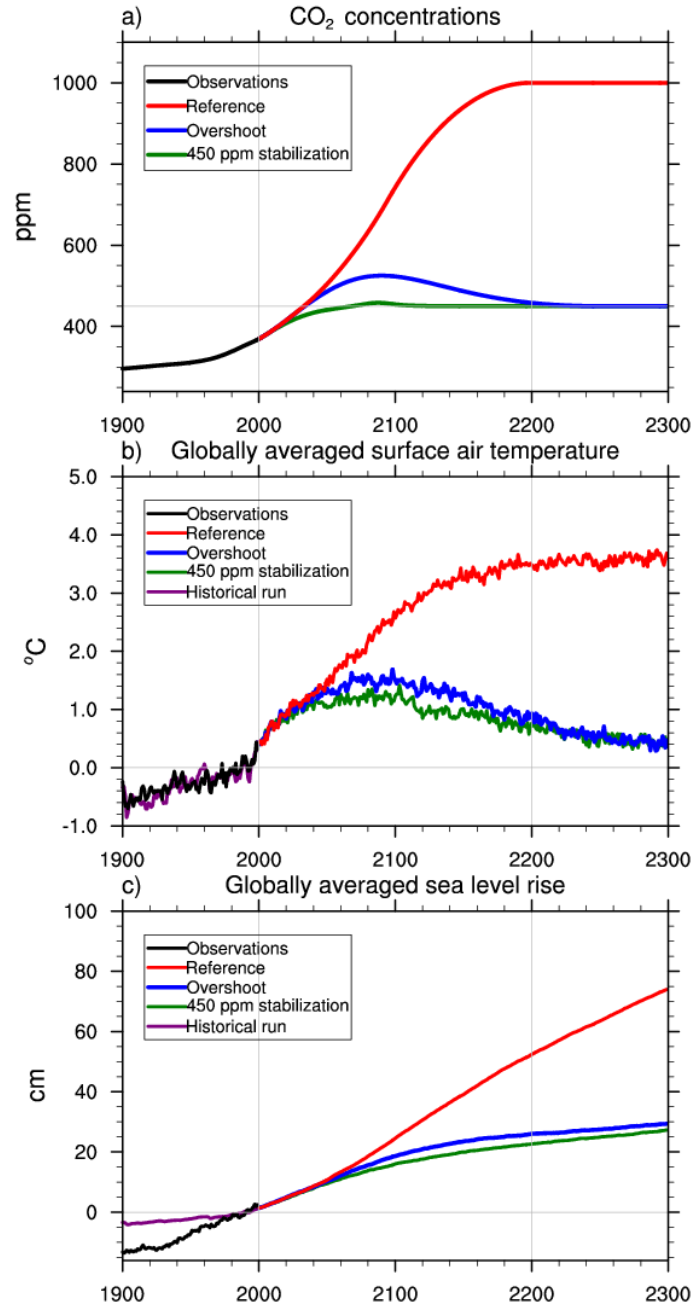
Trajectory of Global Fossil Fuel Emissions



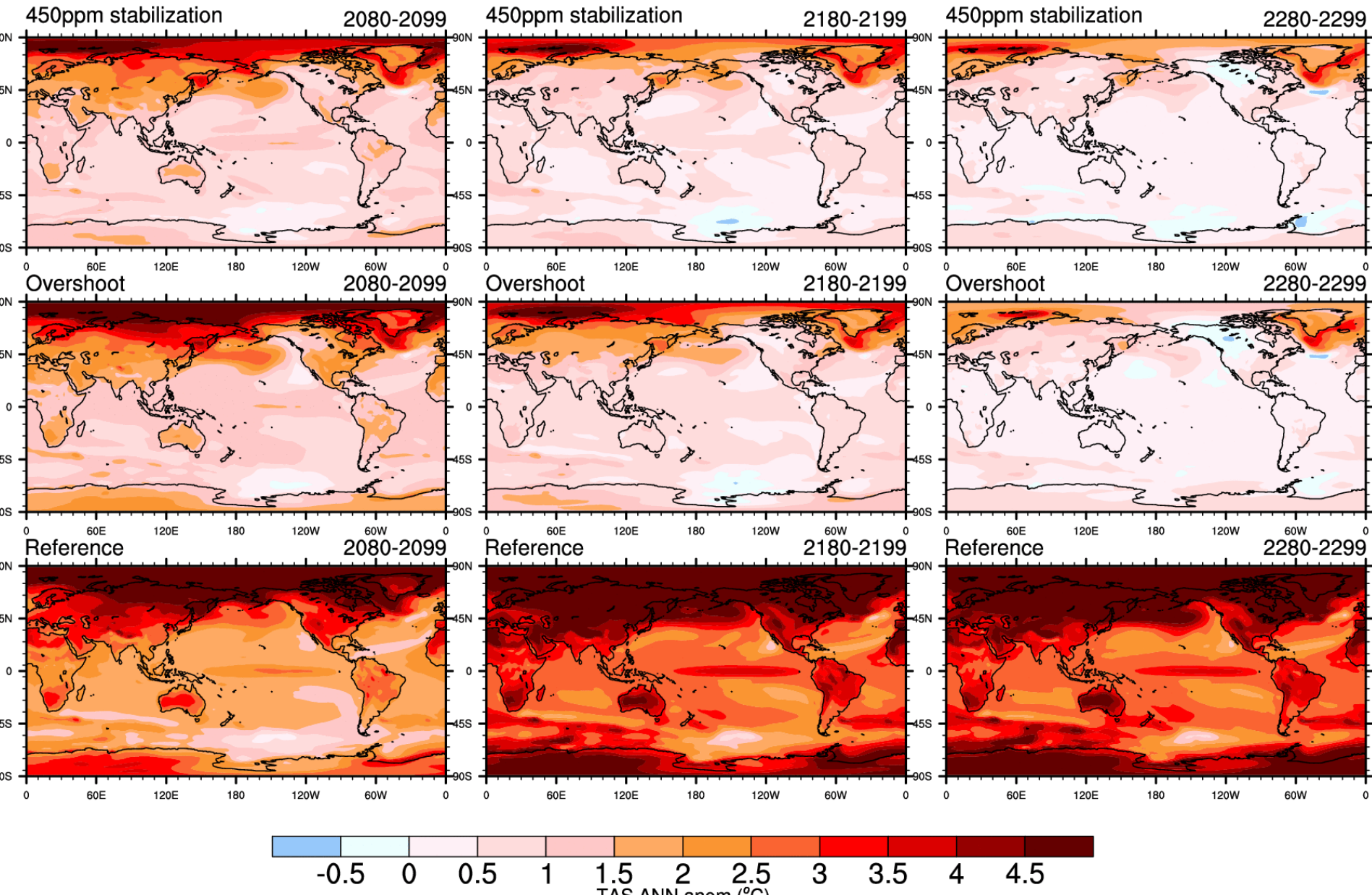
*From T. Wigley talk to American Enterprise
Institute Conference June 2008 and March
2009 publication*



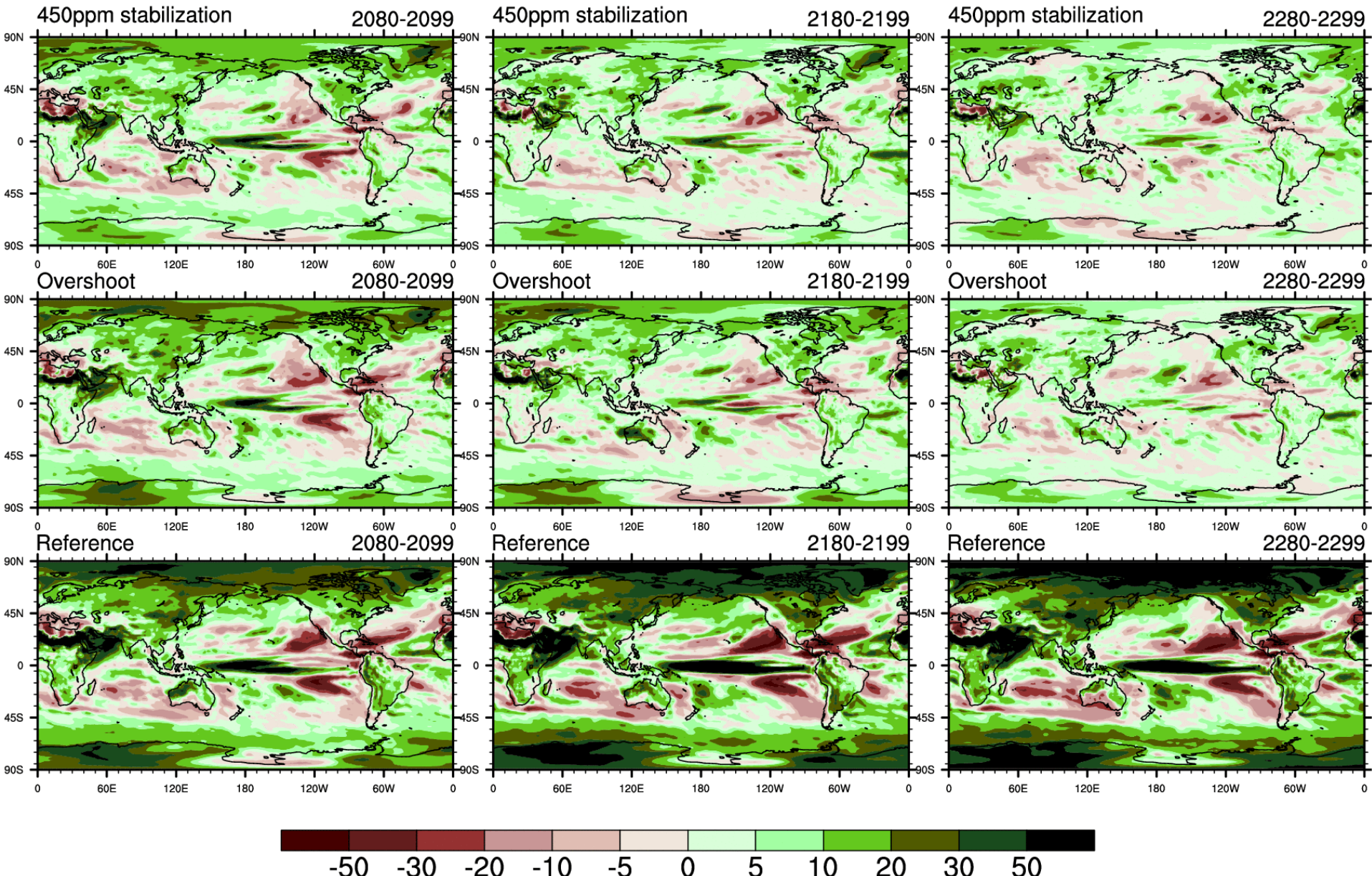
The Overshoot scenario (Wigley)



Annual Surface Temperature Change

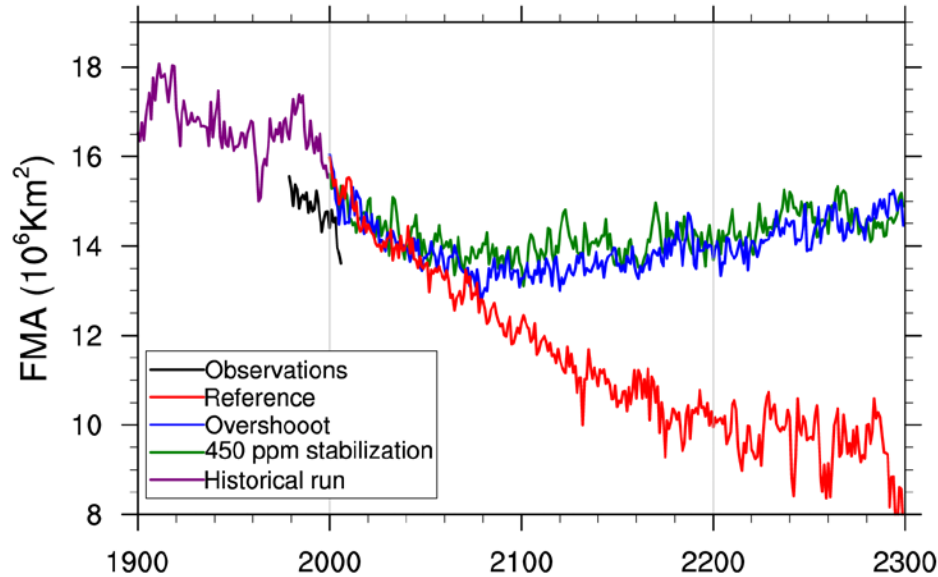


Annual Precipitation Change

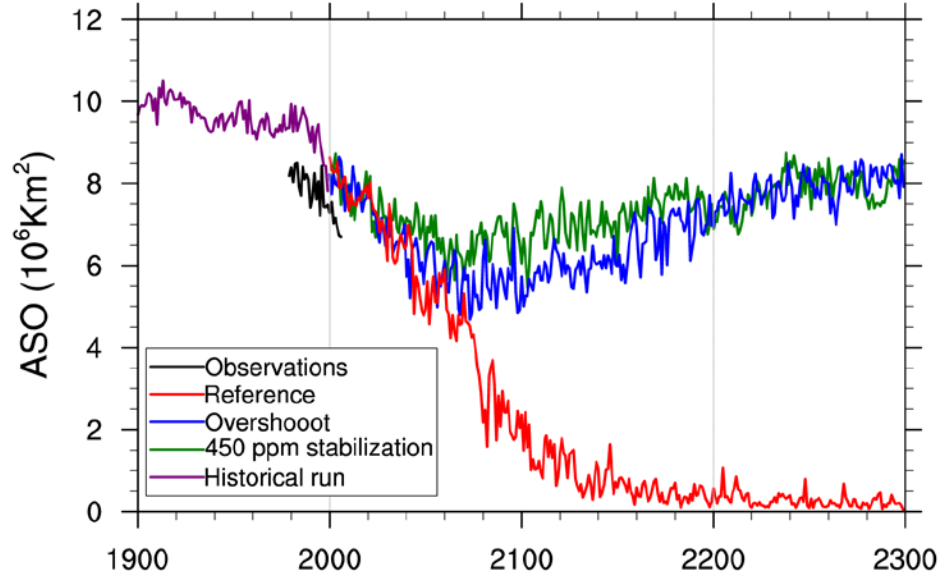


Sea Ice Changes

Arctic sea ice extent



Non-mitigation



Impacts

- Ecology
- Ocean
- Permafrost
- Changes in extremes: Heat waves and water (flooding and droughts)



The End



NCAR