



IPCC Fifth Assessment Report Synthesis Report

IPCC AR5 Synthesis Report

ipcc
INTERGOVERNMENTAL PANEL ON climate change



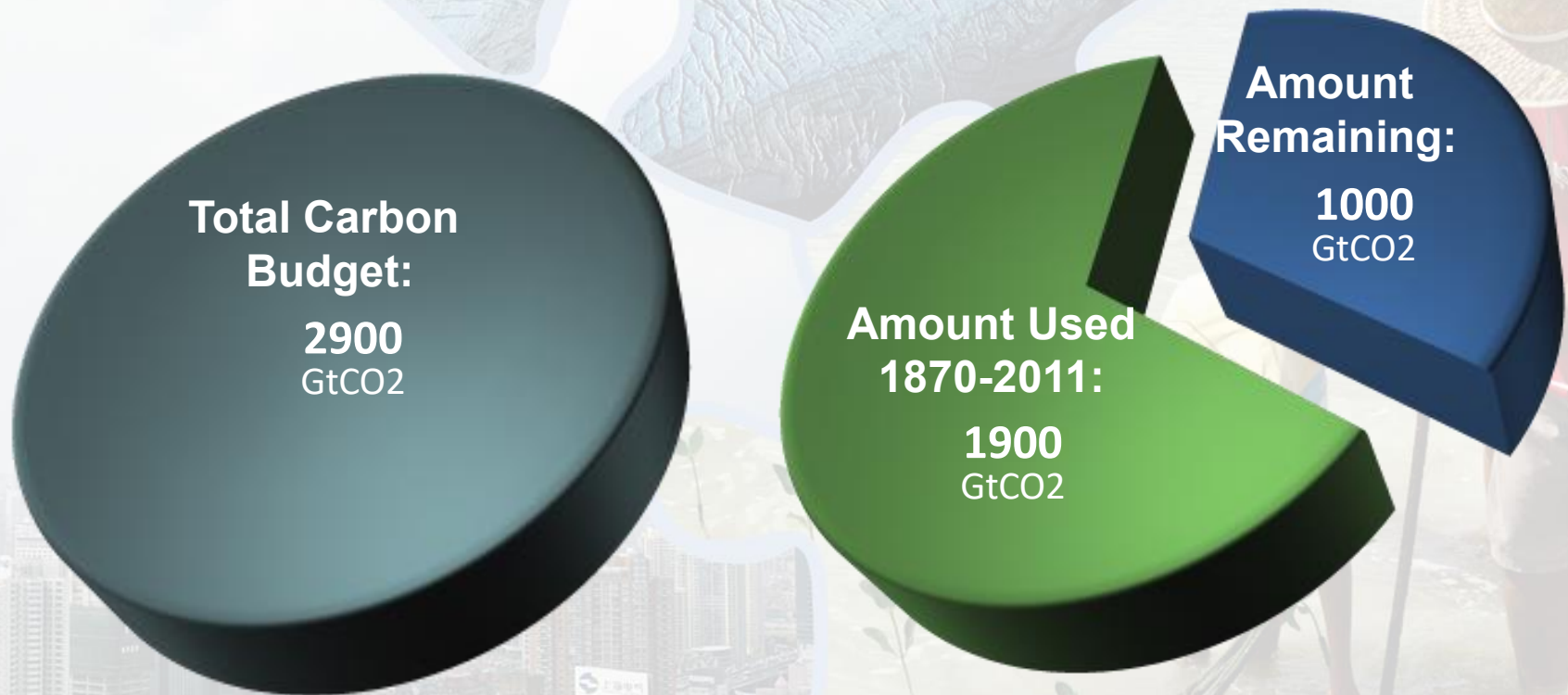
The IPCC Synthesis Report

– Integration of three Working Group Reports of the 5th Assessment, 2013-2014

- **WG I :** **The Physical Science Basis**
- **WGII:** **Impacts, Adaptation and Vulnerability**
- **WG III:** **Mitigation of Climate Change**

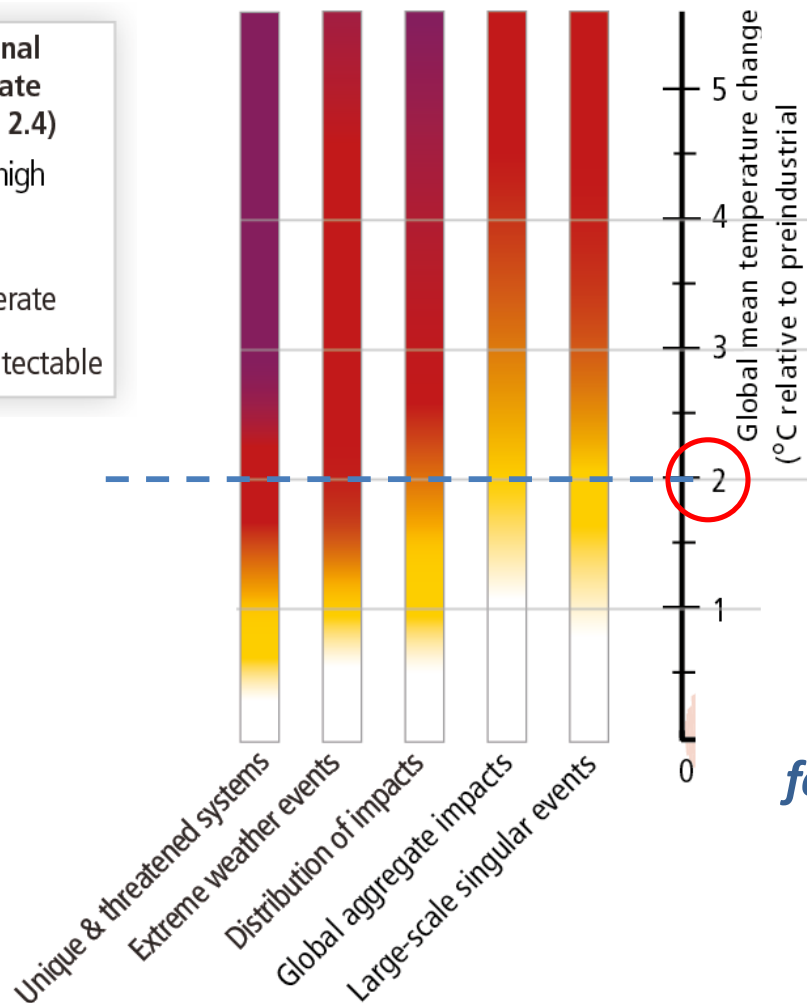
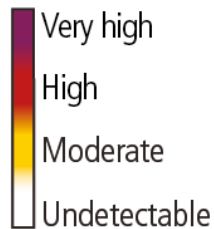
The window for action is rapidly closing

65% of our carbon budget compatible with a 2°C goal already used



AR5 WGI SPM

Level of additional risk due to climate change (see box 2.4)

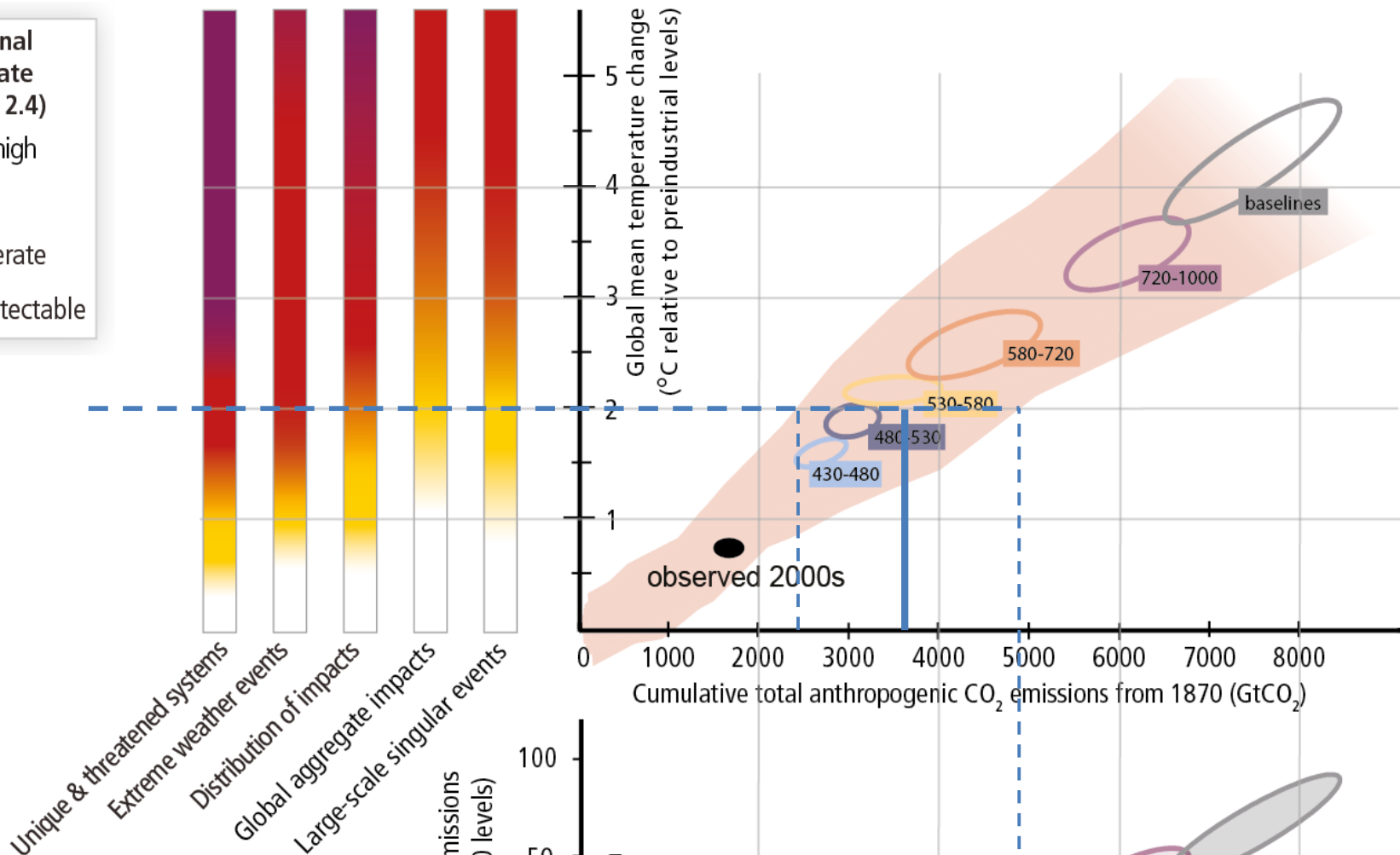
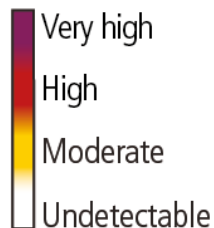


The risks from climate change, assessed by the WGII of the IPCC AR5, and aggregated in five “Reasons for Concern”

Levels of risk across the Reasons for Concern can be associated with a level of global temperature change.

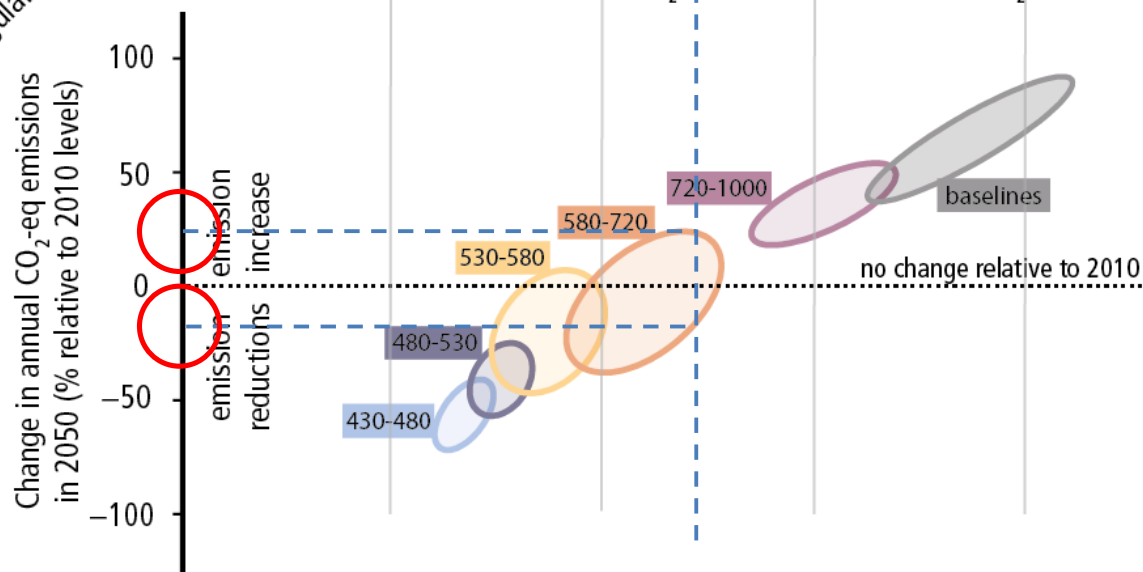
Here shown for a warming by 2°C

Level of additional risk due to climate change (see box 2.4)



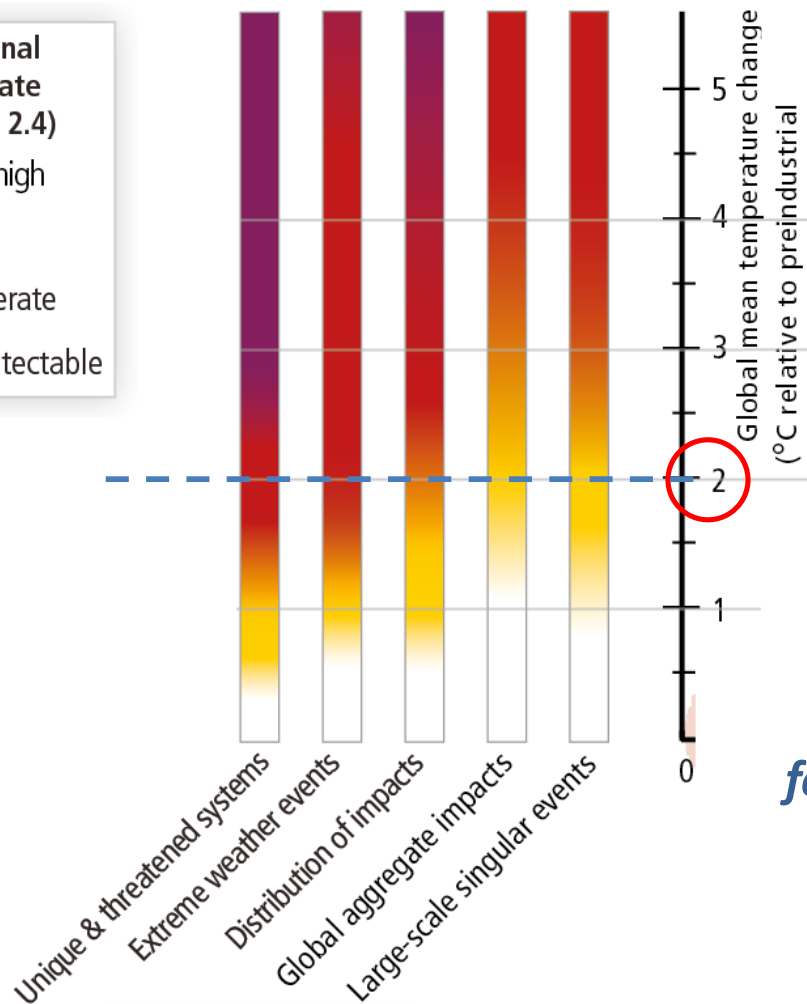
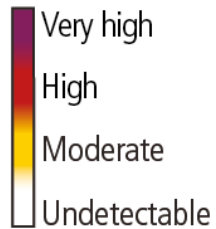
The constraint on changes in GHG emissions by 2050 depends on the sensitivity of the climate response.

Here, with low climate sensitivity



DETAILS

Level of additional risk due to climate change (see box 2.4)

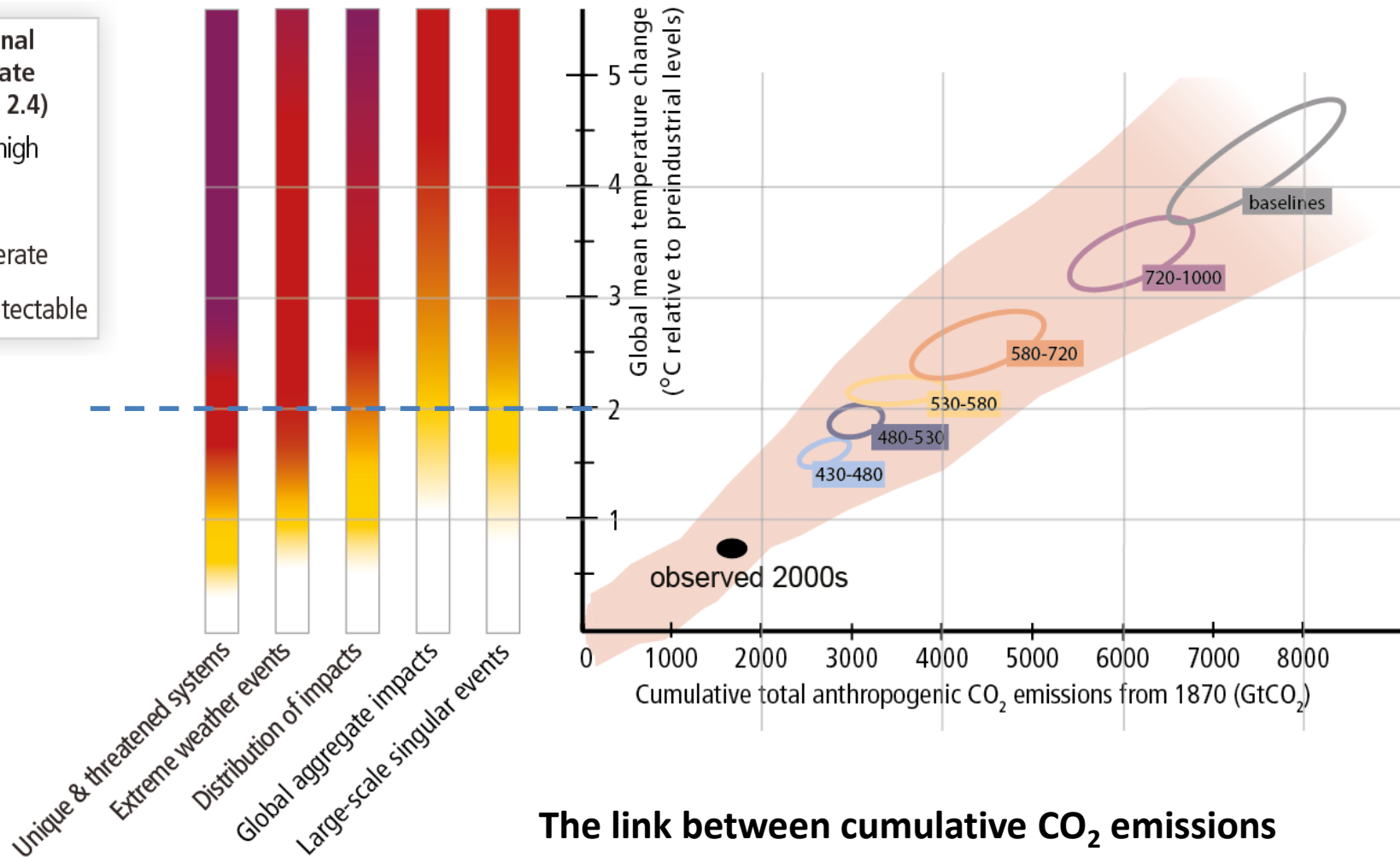
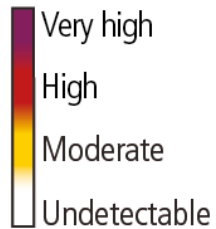


The risks from climate change, assessed by the WGII of the IPCC AR5, and aggregated in five “Reasons for Concern”

Levels of risk across the Reasons for Concern can be associated with a level of global temperature change.

Here shown for a warming by 2°C

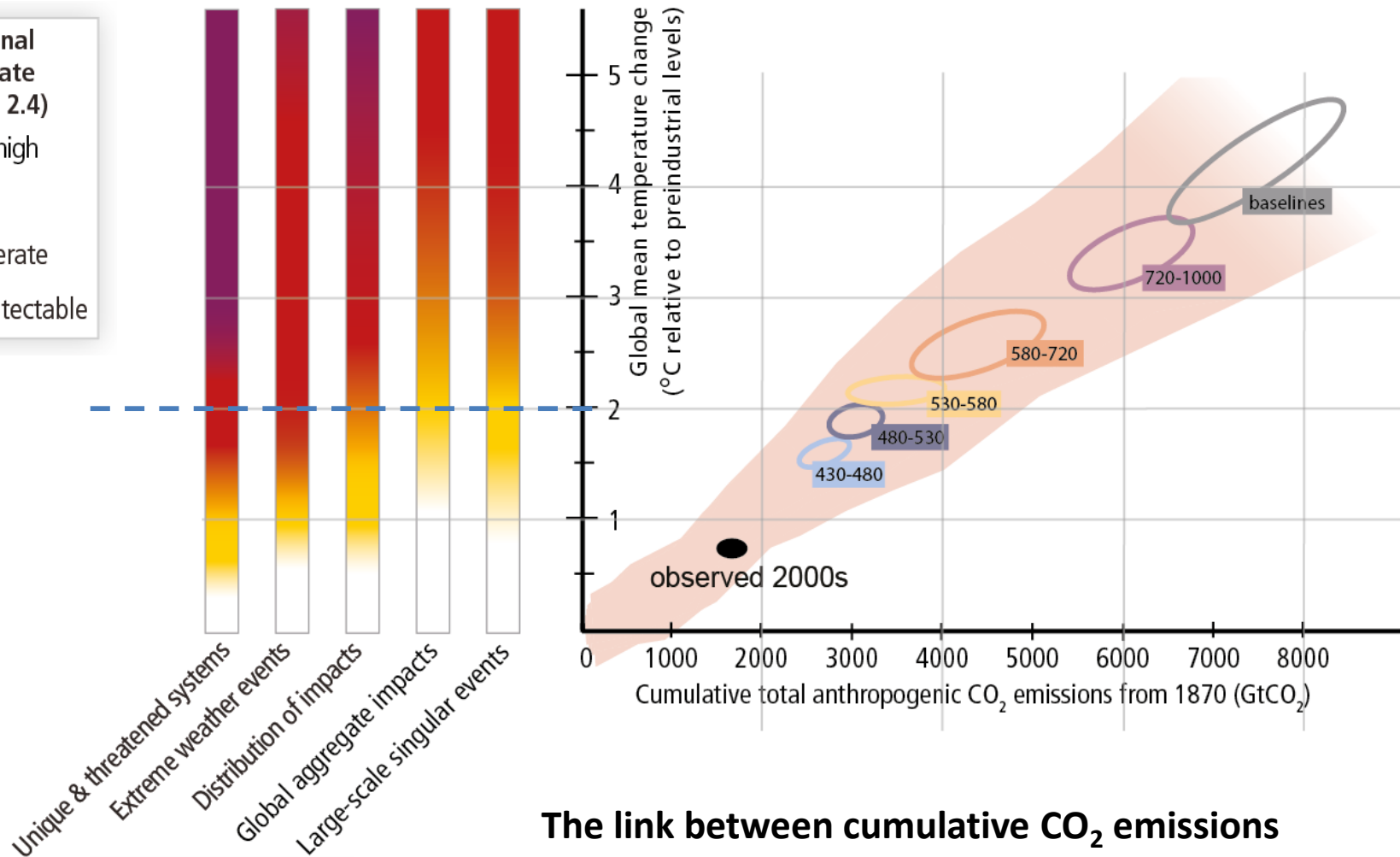
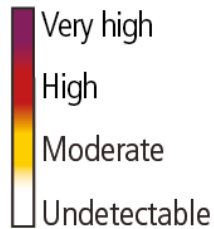
Level of additional risk due to climate change (see box 2.4)



The link between cumulative CO₂ emissions and global mean temperature

The pink plume is from WGI complex models. It includes the uncertainty from non-CO₂ gases and climate and carbon cycle uncertainty, using the likely range

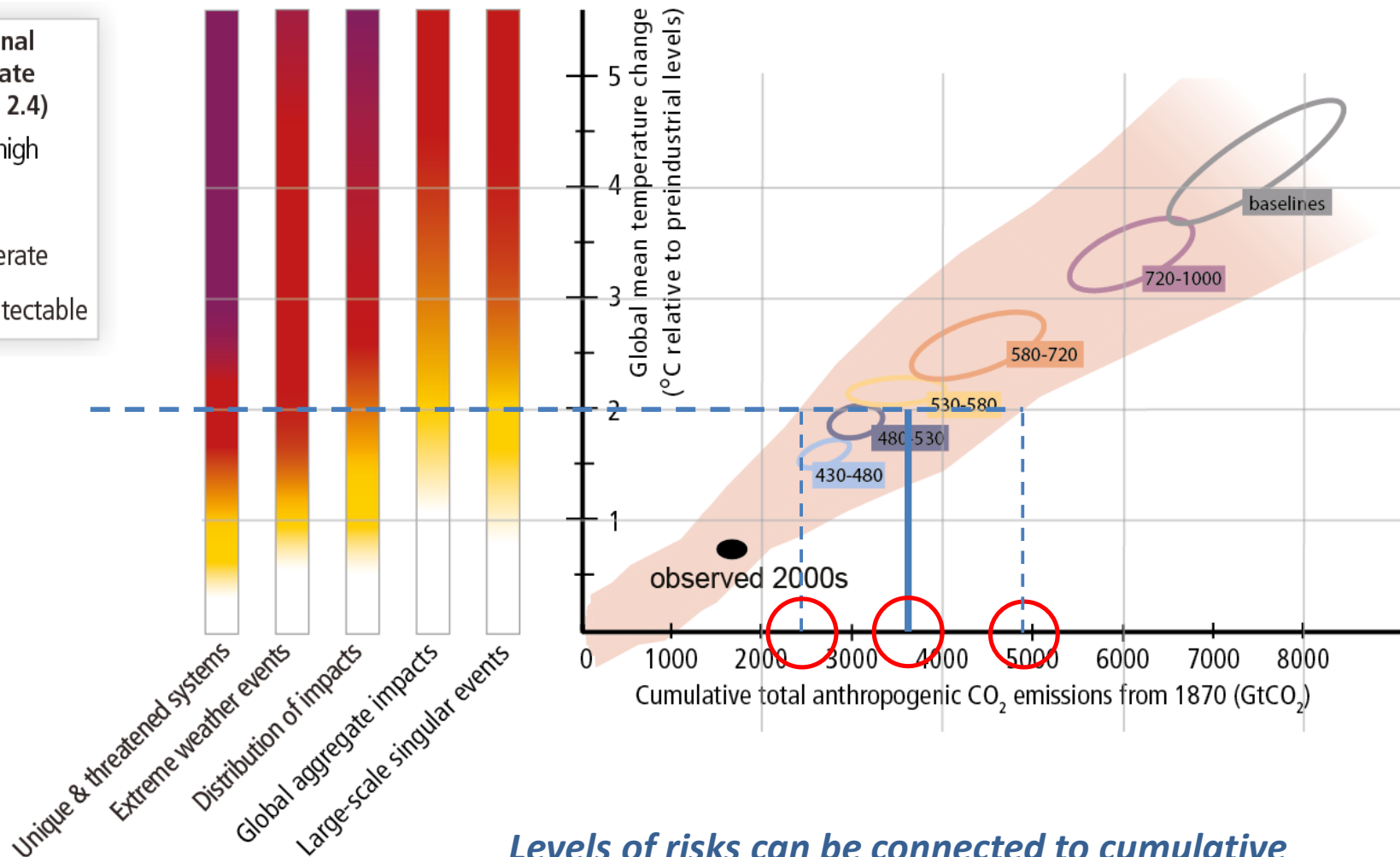
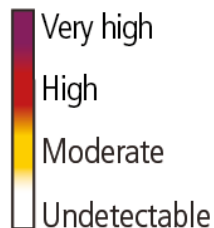
Level of additional risk due to climate change (see box 2.4)



The link between cumulative CO₂ emissions and global mean temperature

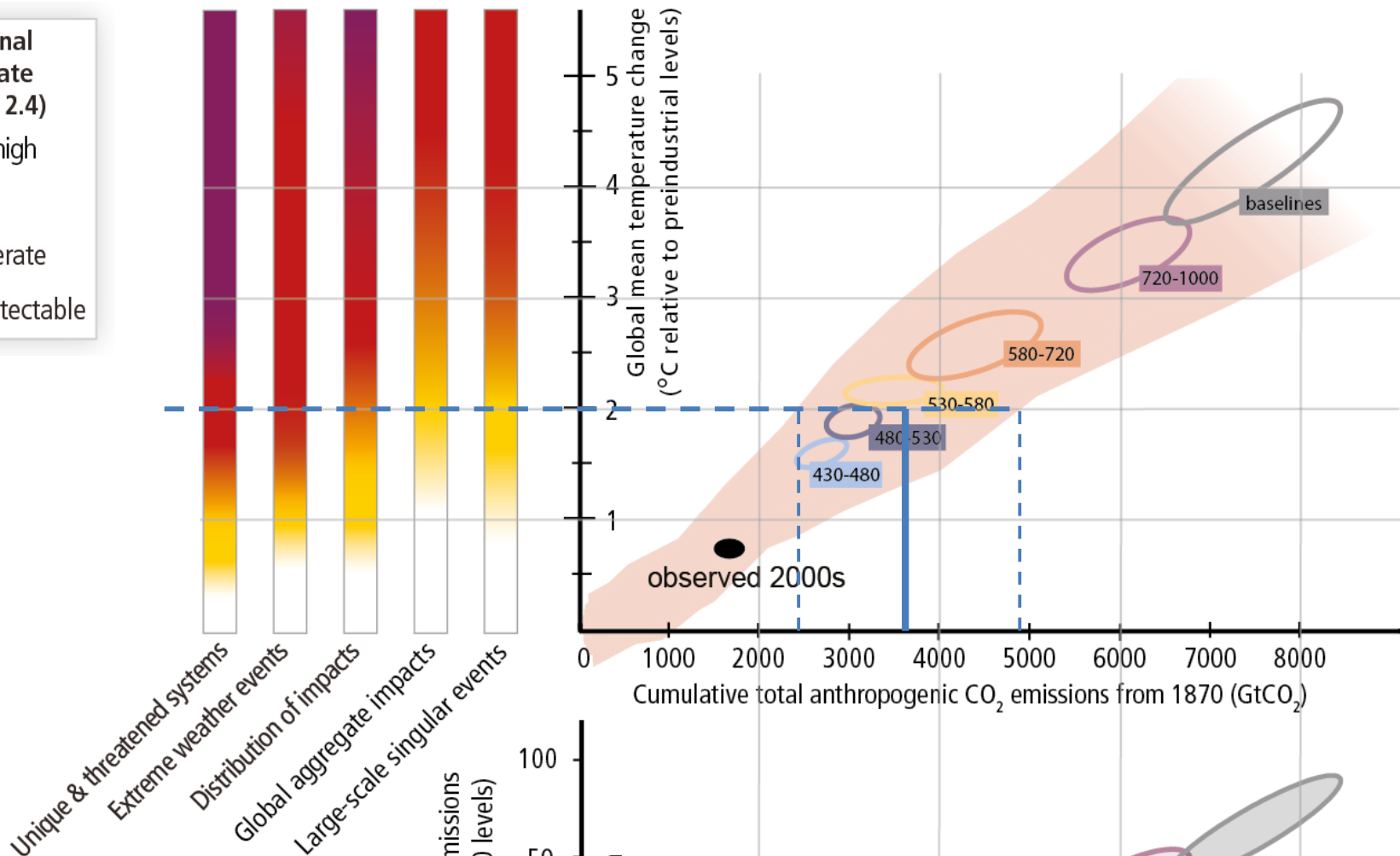
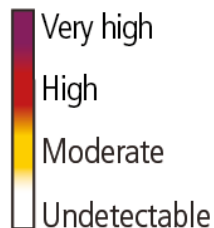
The ellipses show results from the WGIII models, using a simple climate model. It does not include climate and carbon cycle uncertainty, but explores more comprehensively the scenario uncertainty from a range of CO₂ and non-CO₂ pathways

Level of additional risk due to climate change (see box 2.4)

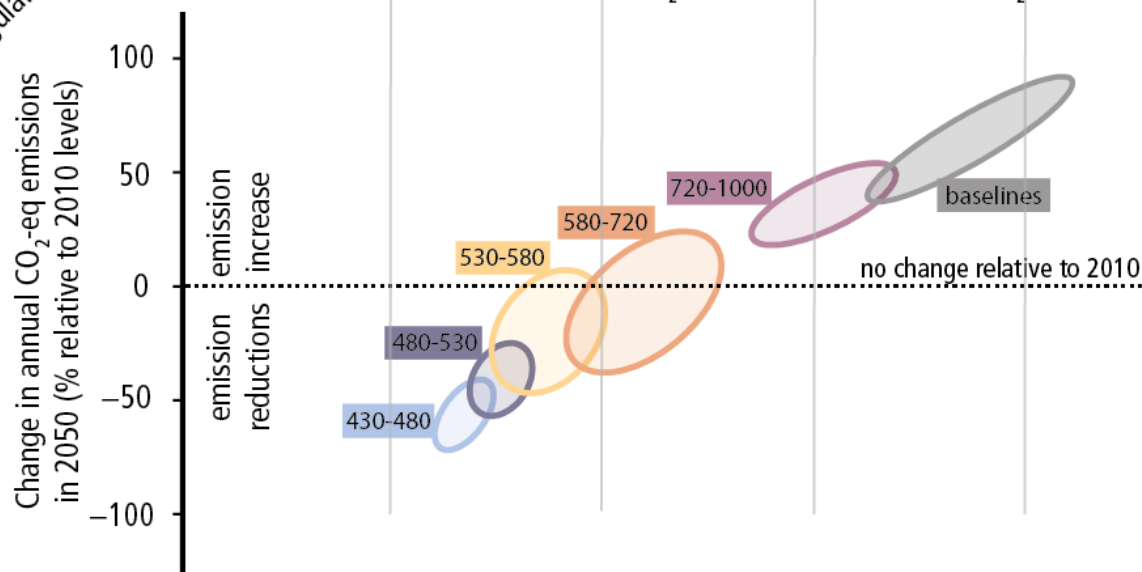


Levels of risks can be connected to cumulative CO₂ emission levels, for the average climate response,

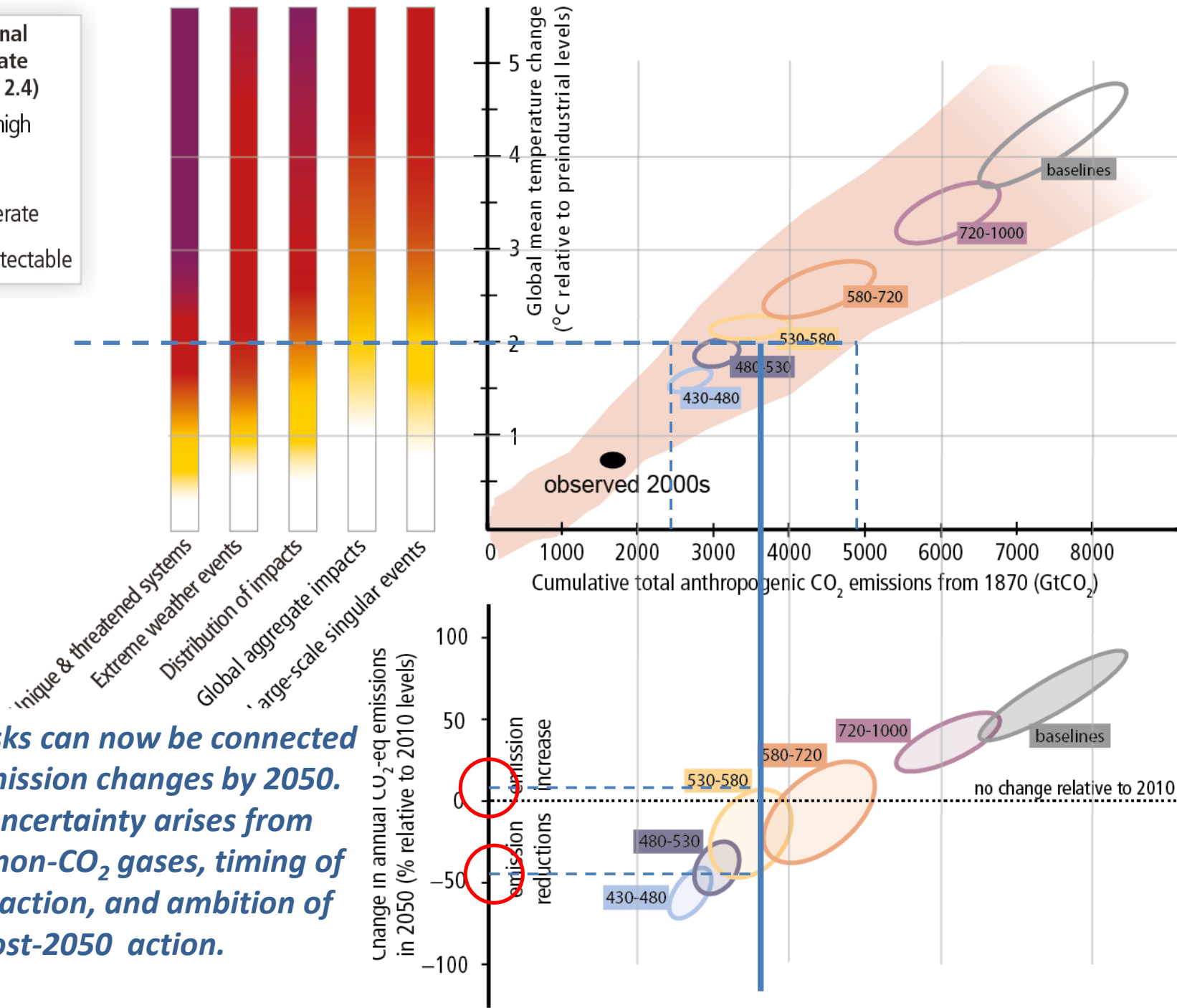
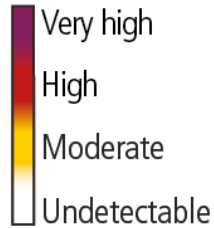
Level of additional risk due to climate change (see box 2.4)



The link between changes in annual GHG emissions by 2050 and the cumulative CO₂ emissions of the WGIII scenario categories

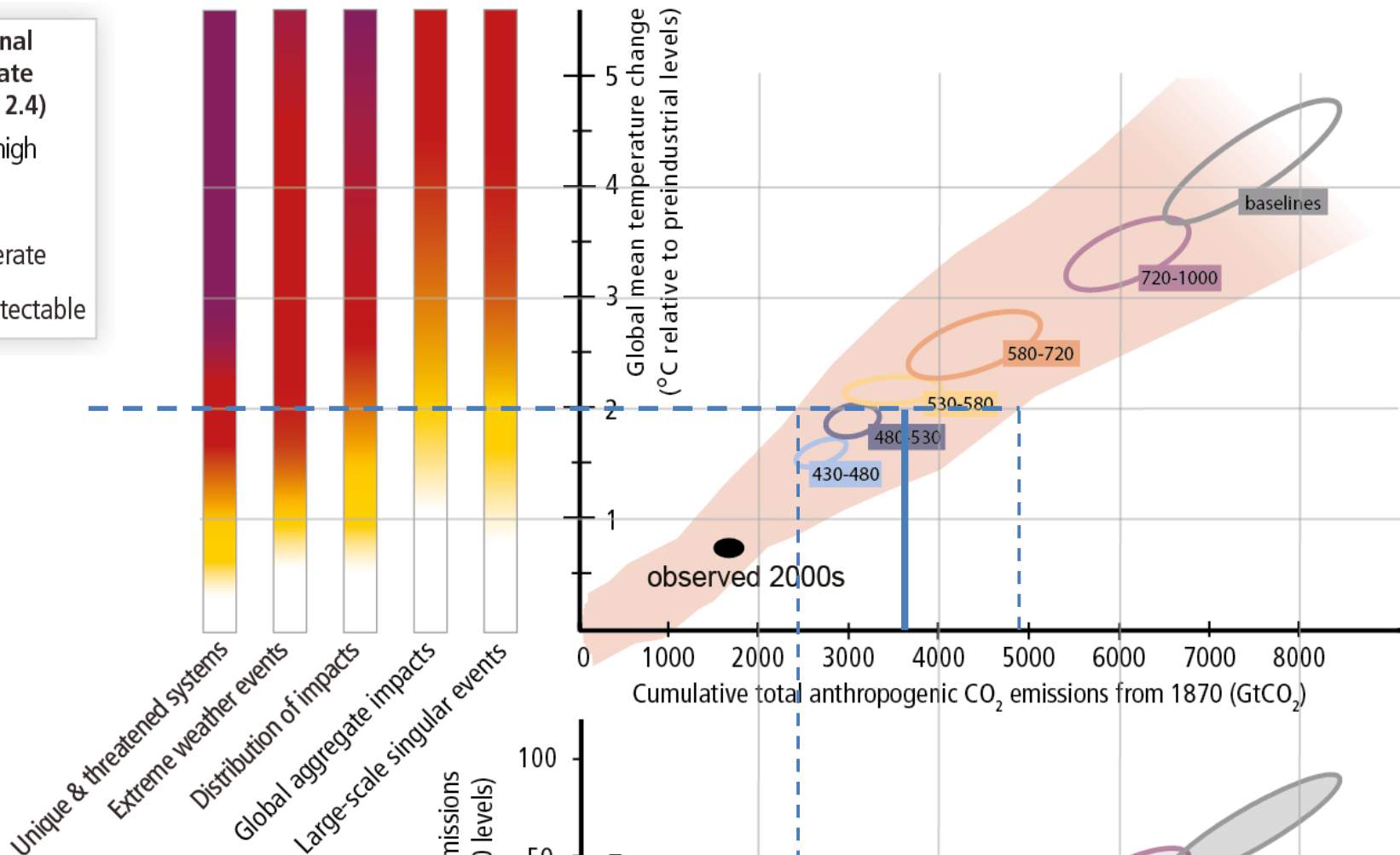
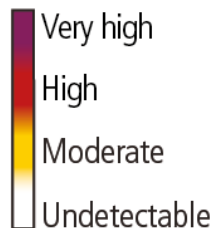


Level of additional risk due to climate change (see box 2.4)



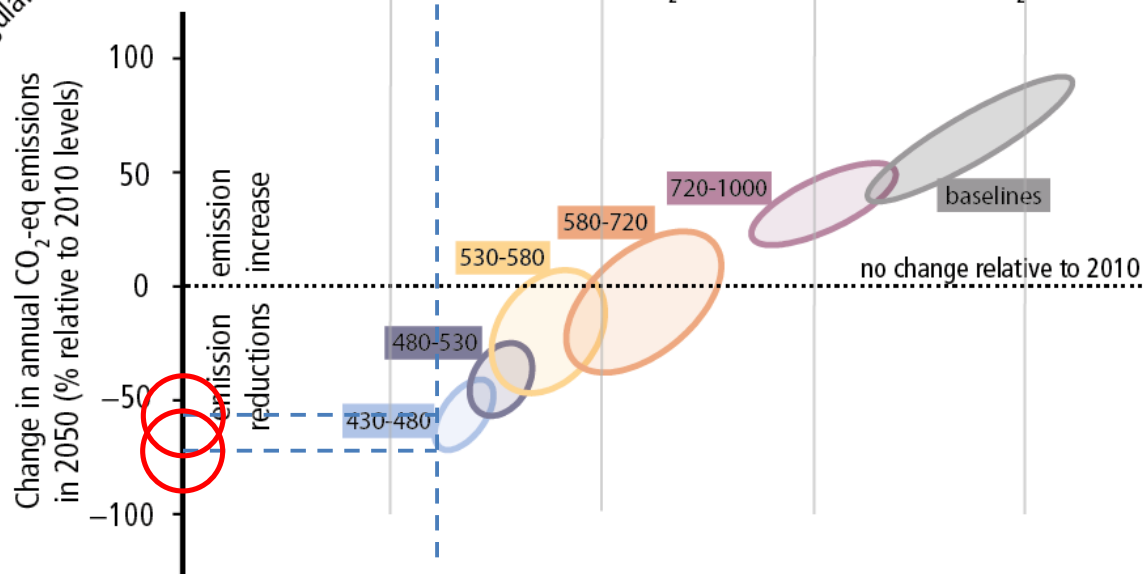
Levels of risks can now be connected to GHG emission changes by 2050. Added uncertainty arises from action on non-CO₂ gases, timing of pre-2050 action, and ambition of post-2050 action.

Level of additional risk due to climate change (see box 2.4)

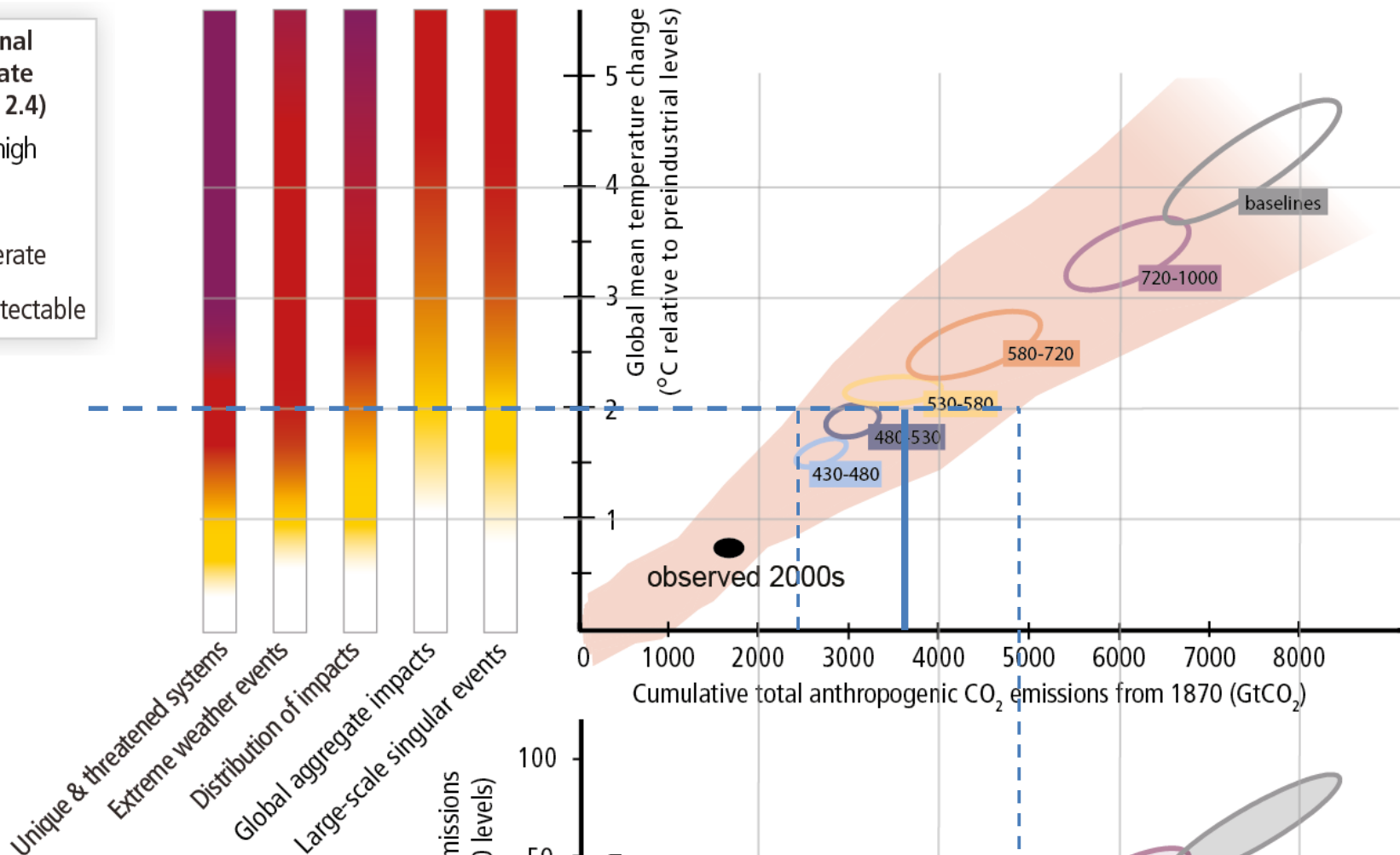
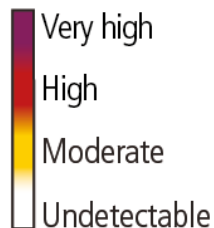


The constraint on changes in GHG emissions by 2050 depends on the sensitivity of the climate response.

Here, with large climate sensitivity



Level of additional risk due to climate change (see box 2.4)



The constraint on changes in GHG emissions by 2050 depends on the sensitivity of the climate response.

Here, with low climate sensitivity

