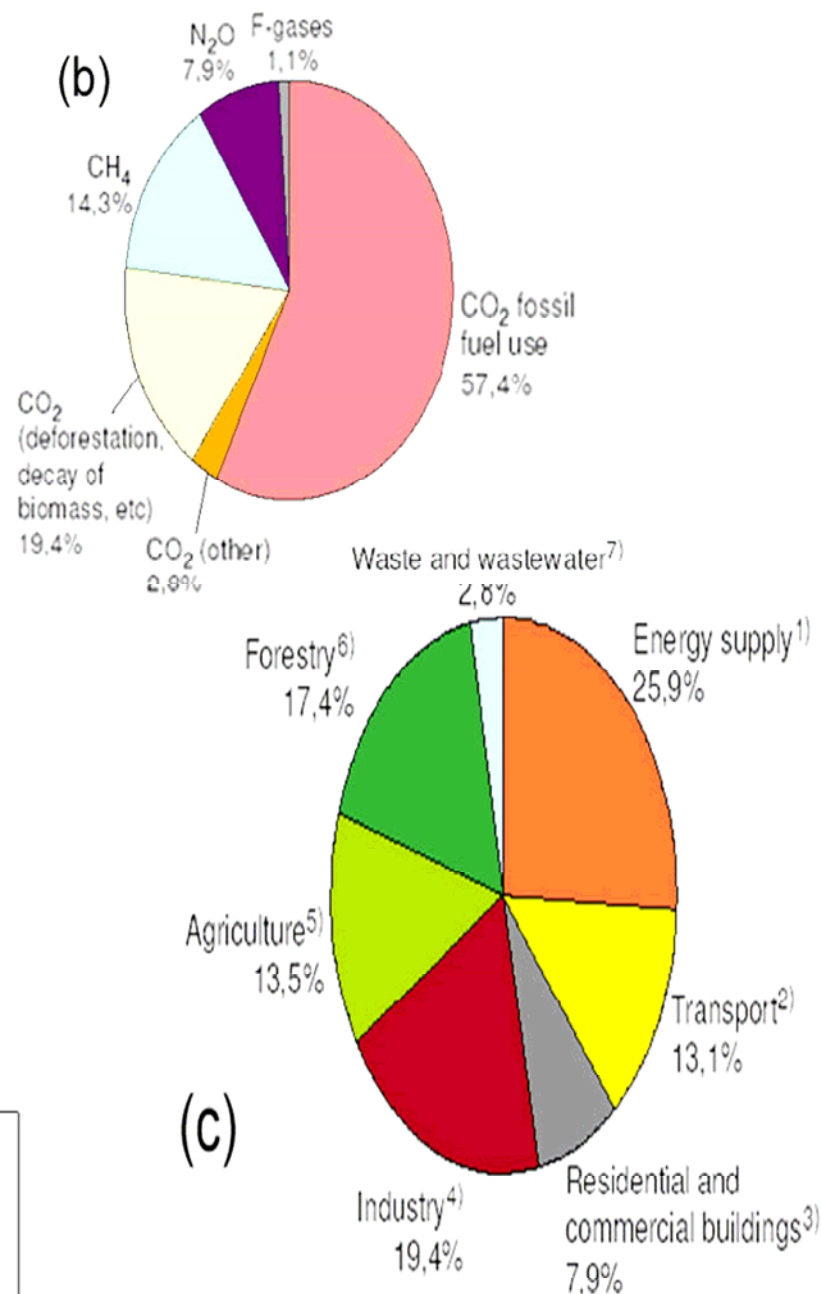
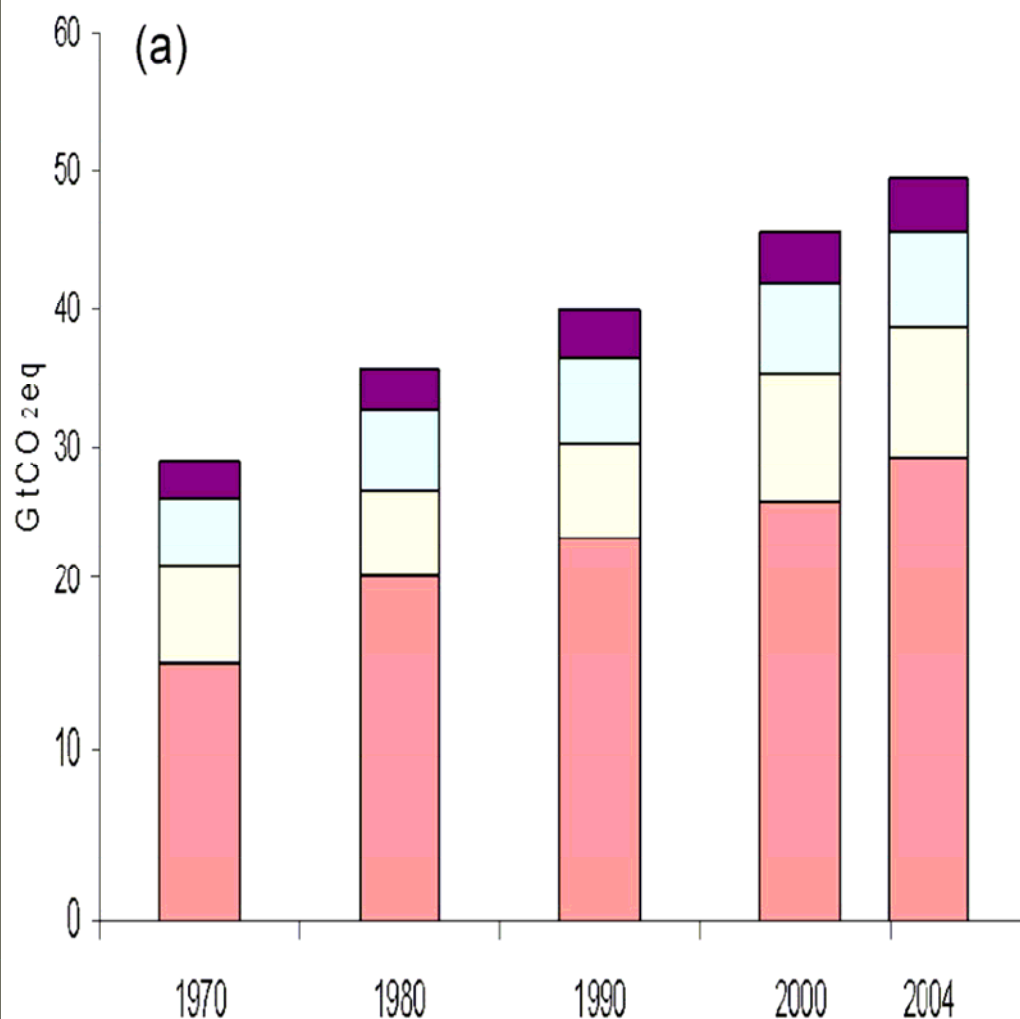
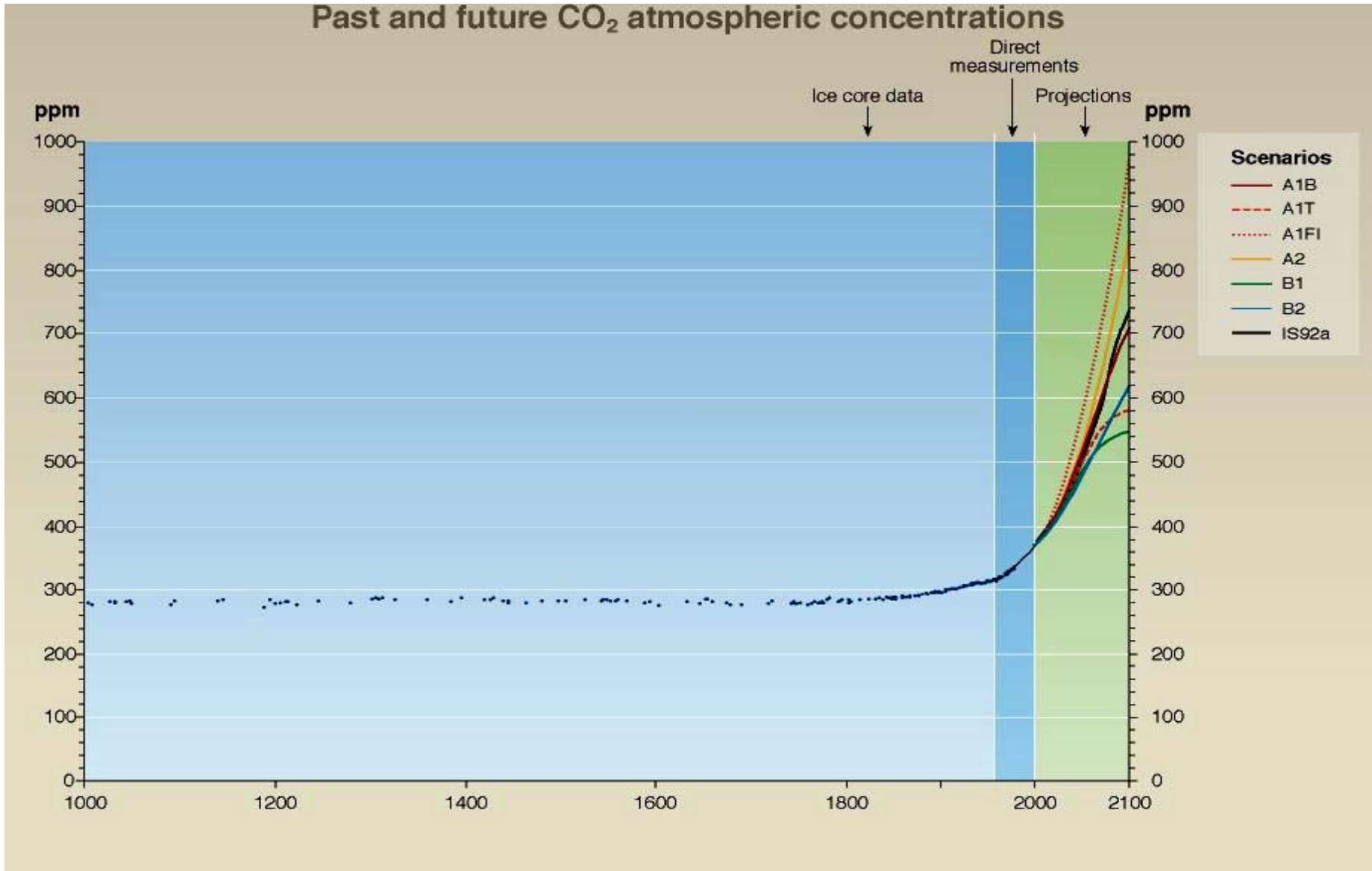


Evolution des émissions de gaz à effet de serre

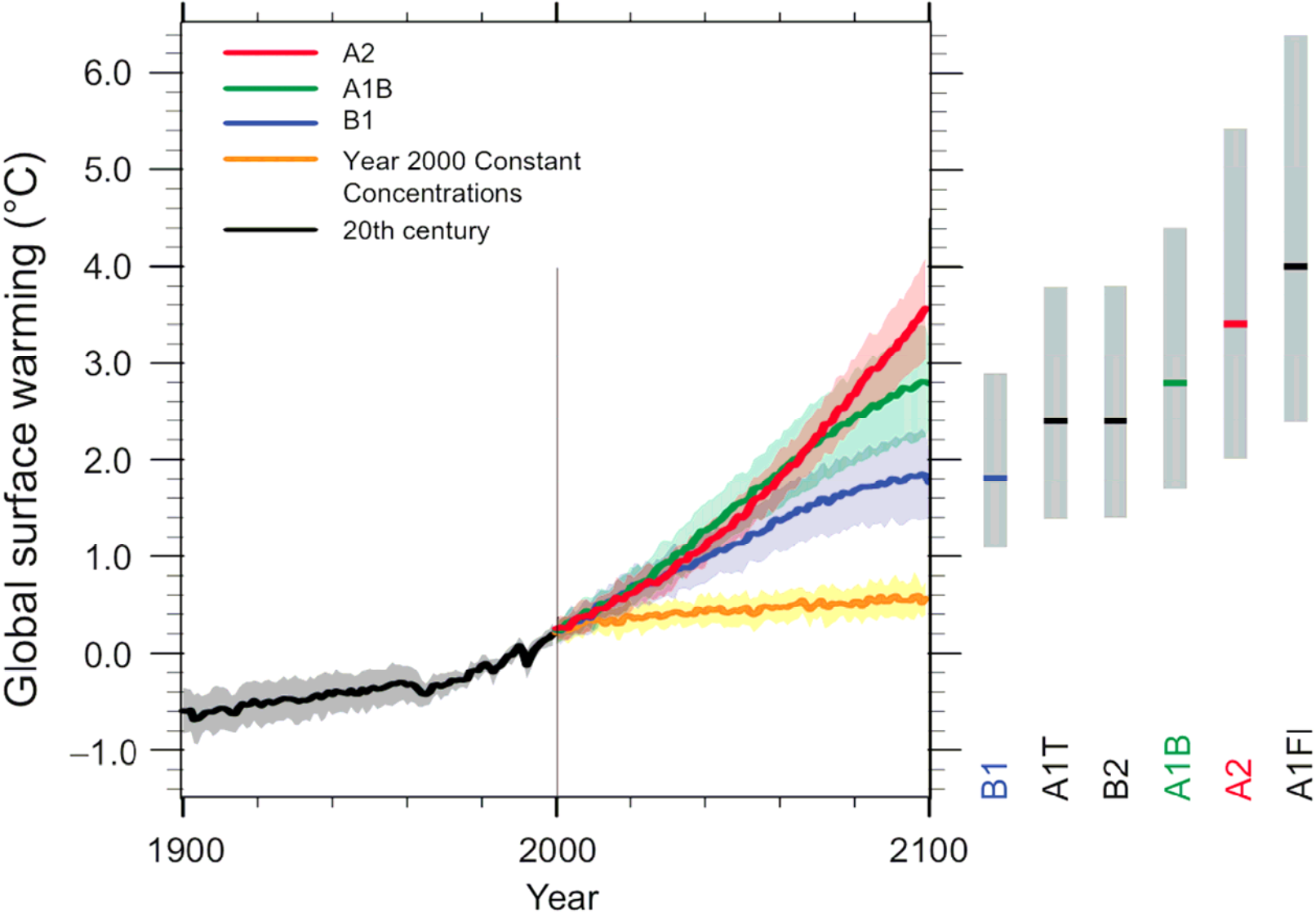


■ CO₂ from fossil fuel use ■ CO₂ from deforestation, decay and peat
■ CH₄ from agriculture, waste and energy ■ N₂O from agriculture and others

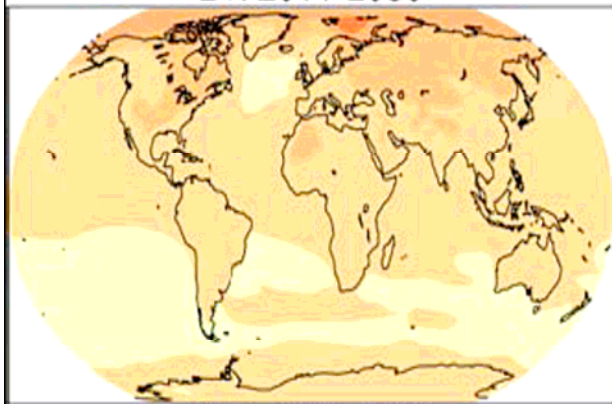
Les concentrations de CO₂ attendues au cours du XXI^{ème} siècle sont deux à quatre fois celles de l'ère préindustrielle



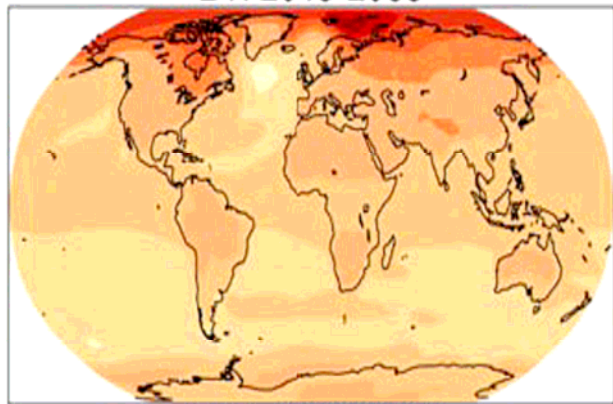
Multi-model Averages and Assessed Ranges for Surface Warming



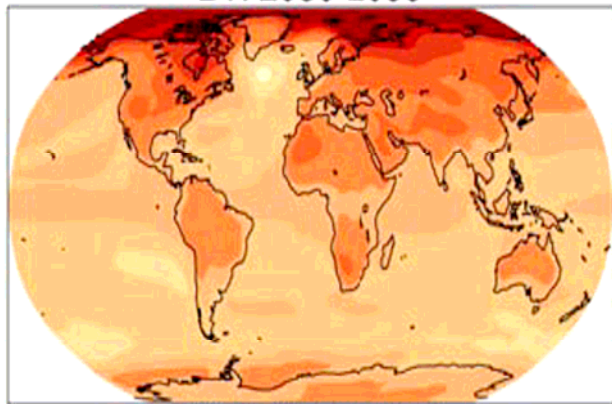
B1: 2011-2030



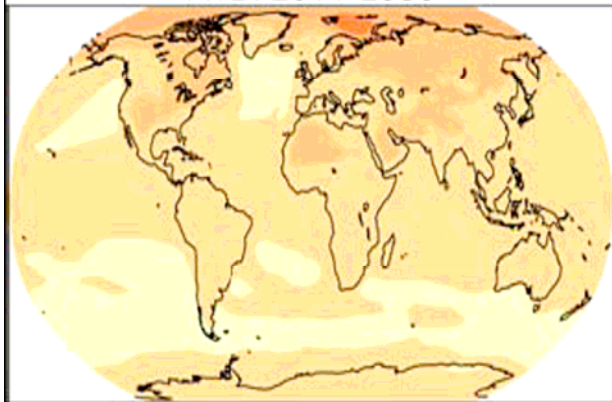
B1: 2046-2065



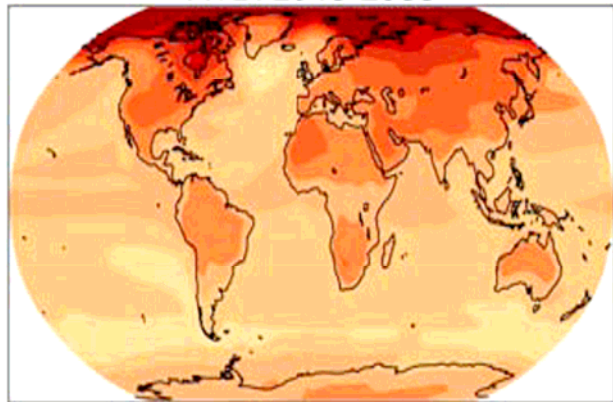
B1: 2080-2099



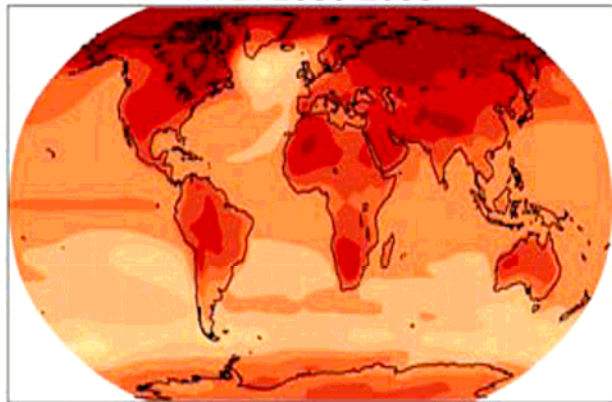
A1B: 2011-2030



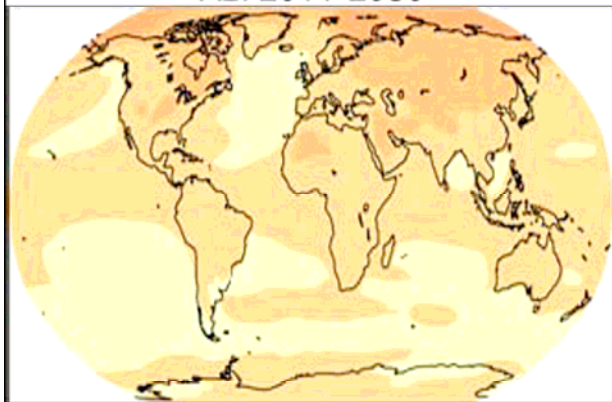
A1B: 2046-2065



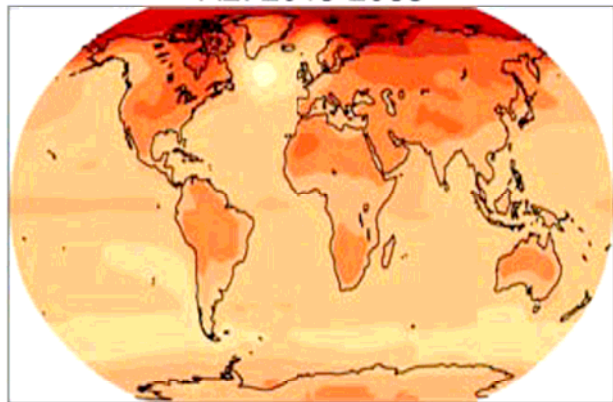
A1B: 2080-2099



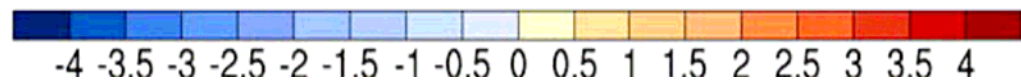
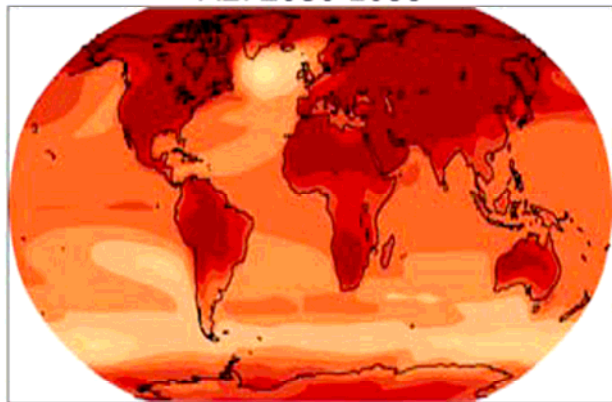
A2: 2011-2030



A2: 2046-2065

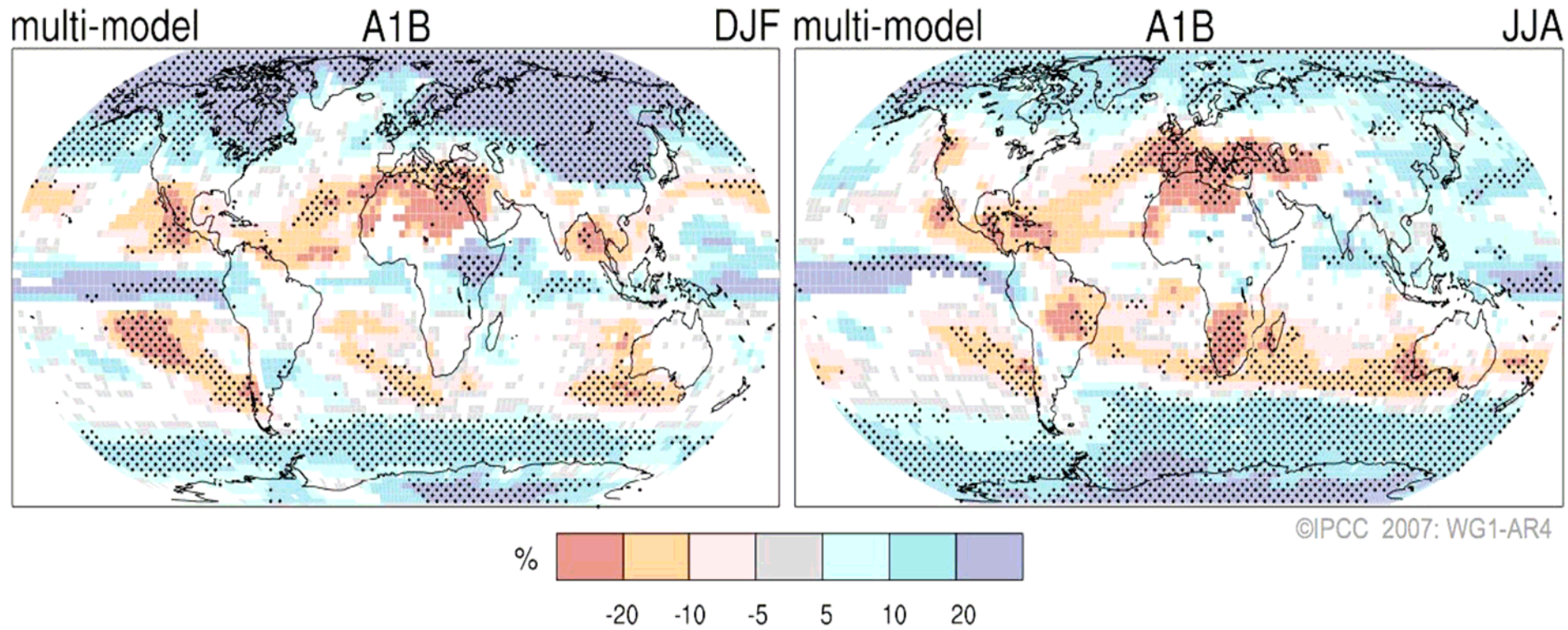


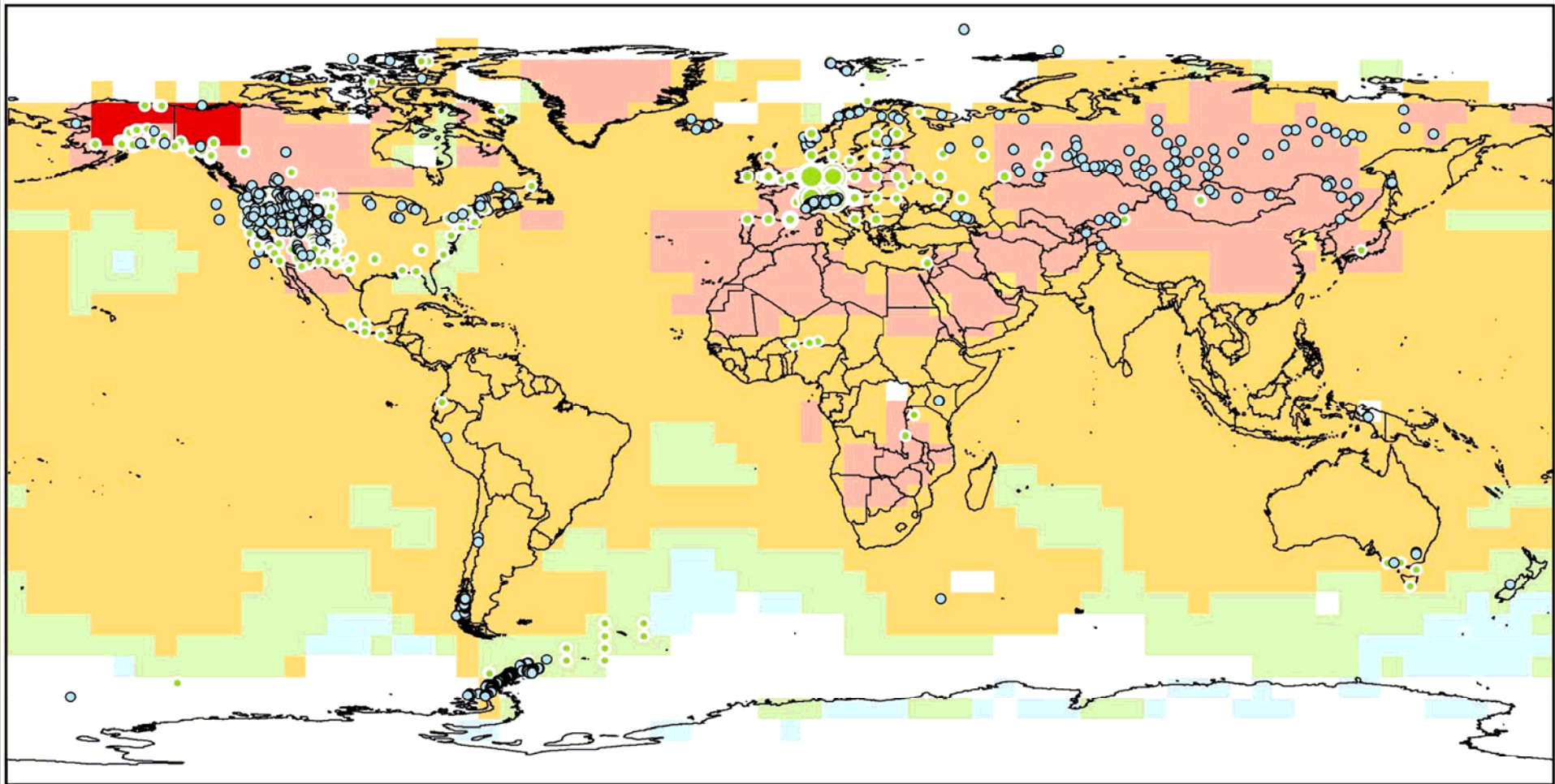
A2: 2080-2099



(°C)

Projected Patterns of Precipitation Changes





Observations

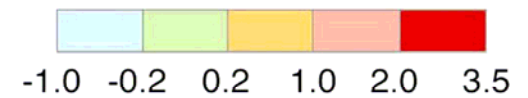
- Physical systems (snow, ice and frozen ground; hydrology; coastal processes)
- Biological systems (terrestrial, marine, and freshwater)

Polar regions include also observed changes in marine and freshwater biological systems.

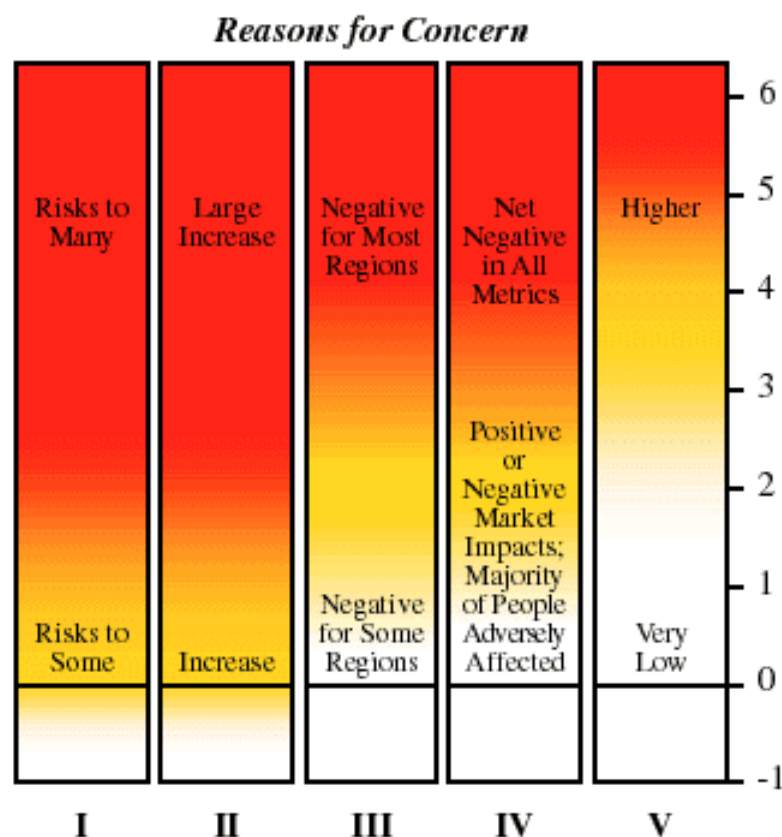
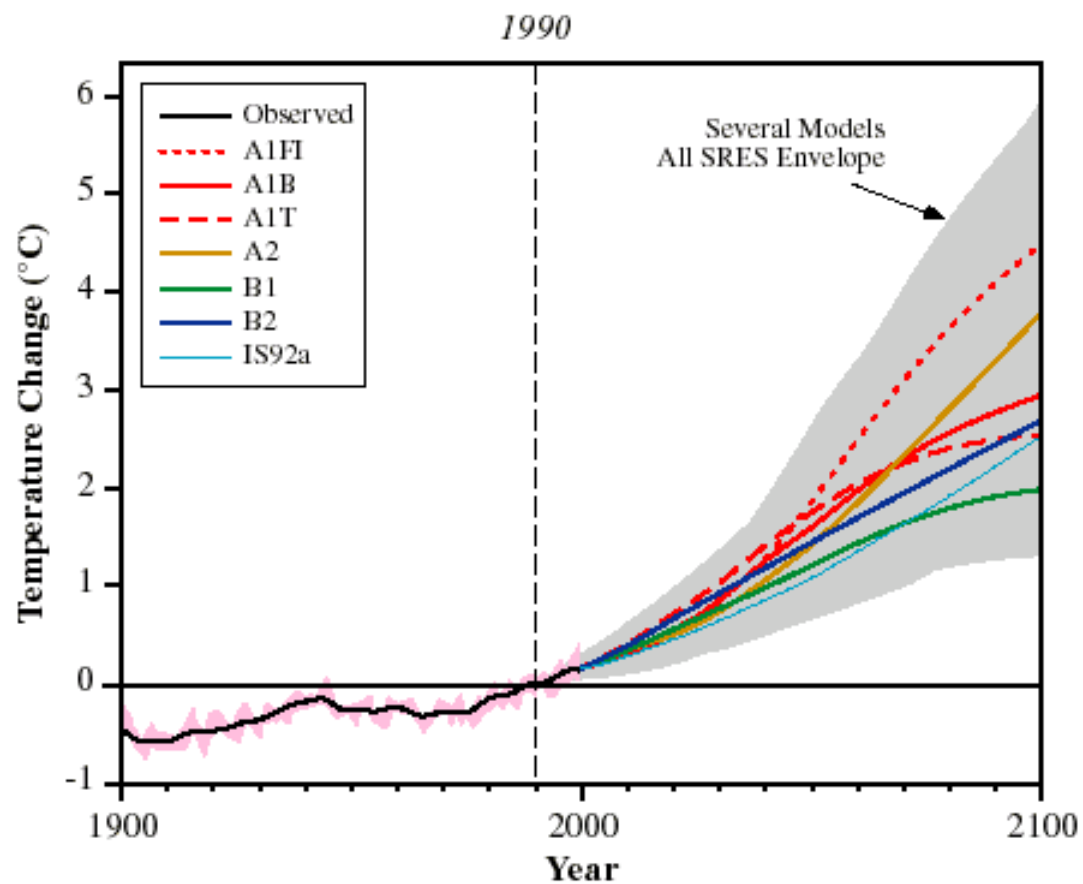
Marine and freshwater includes observed changes at sites and large areas in oceans, small islands and continents.

Circles in Europe represent 1 to 7,500 data series.

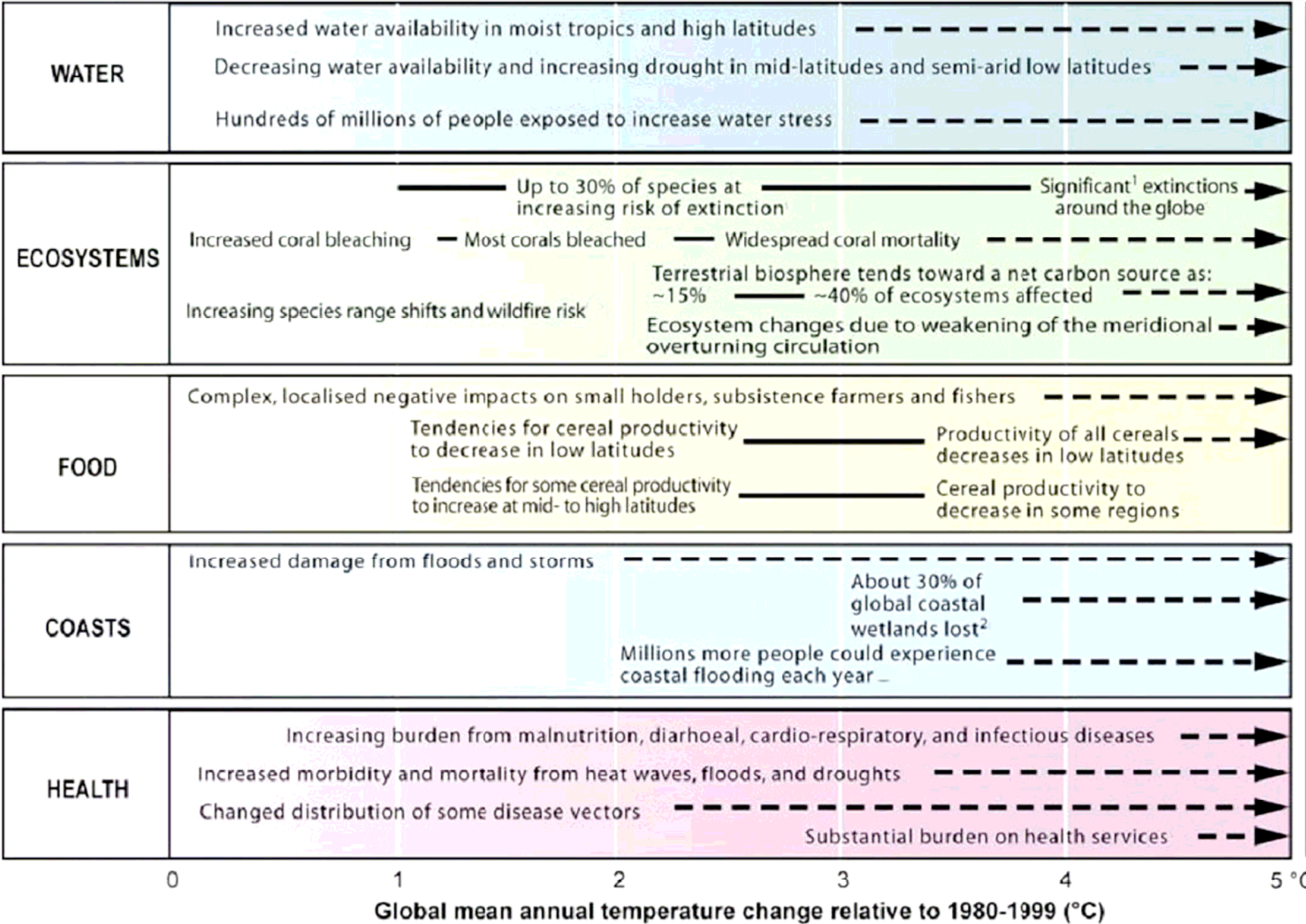
Temperature change °C 1970-2004



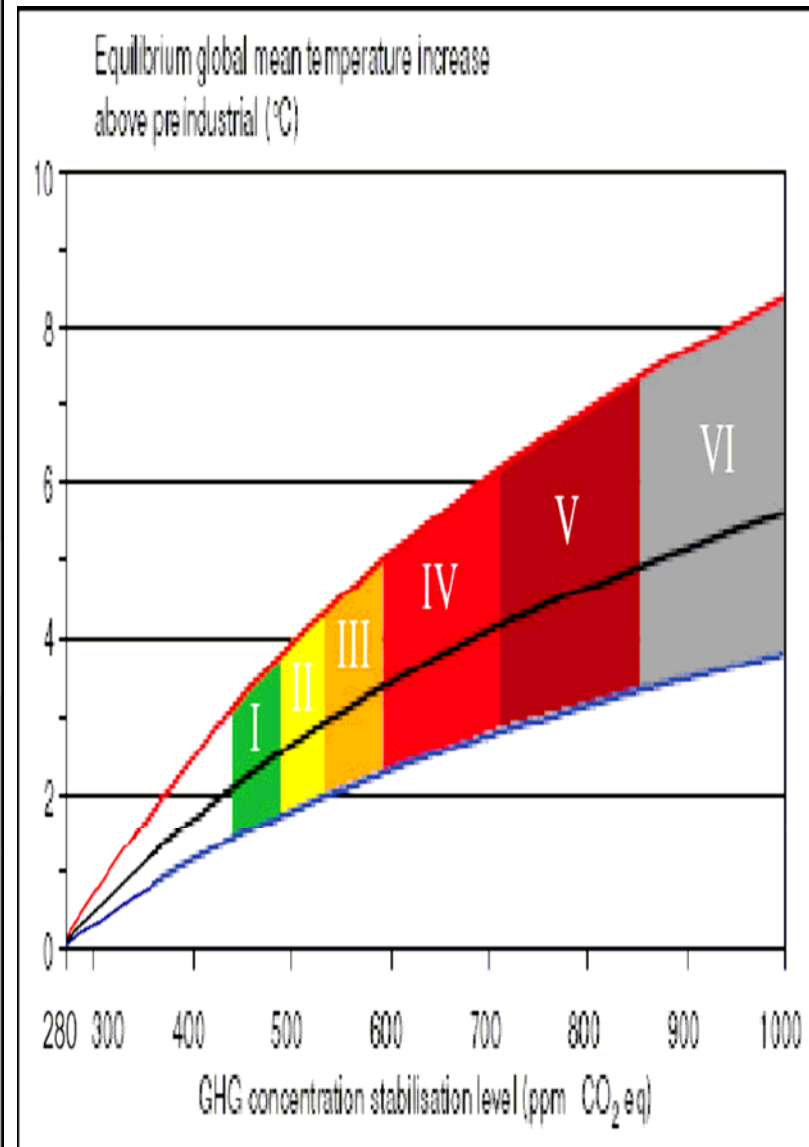
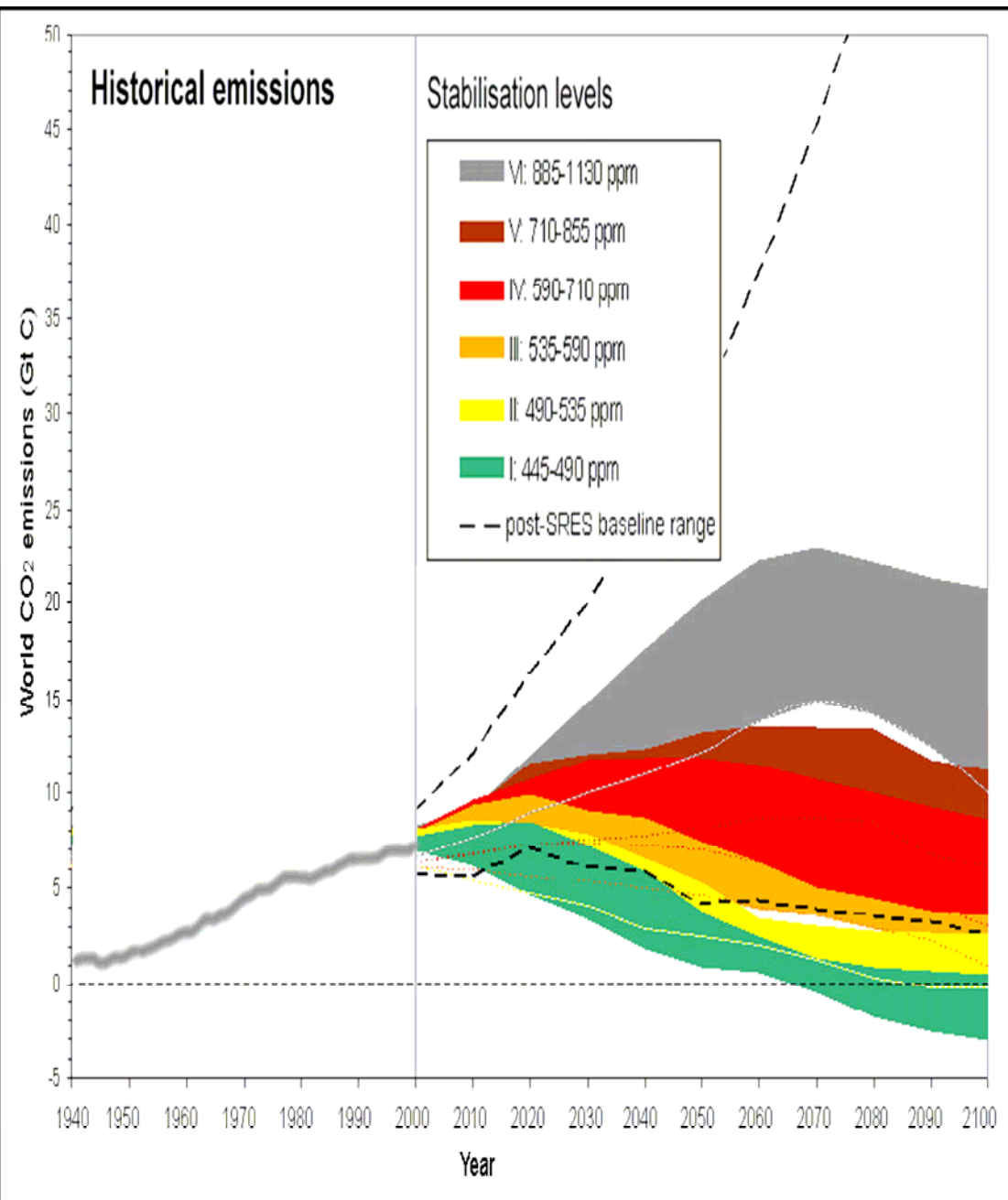
- 1-30
- 31-100
- 101-800
- 801-1200
- 1201-7500



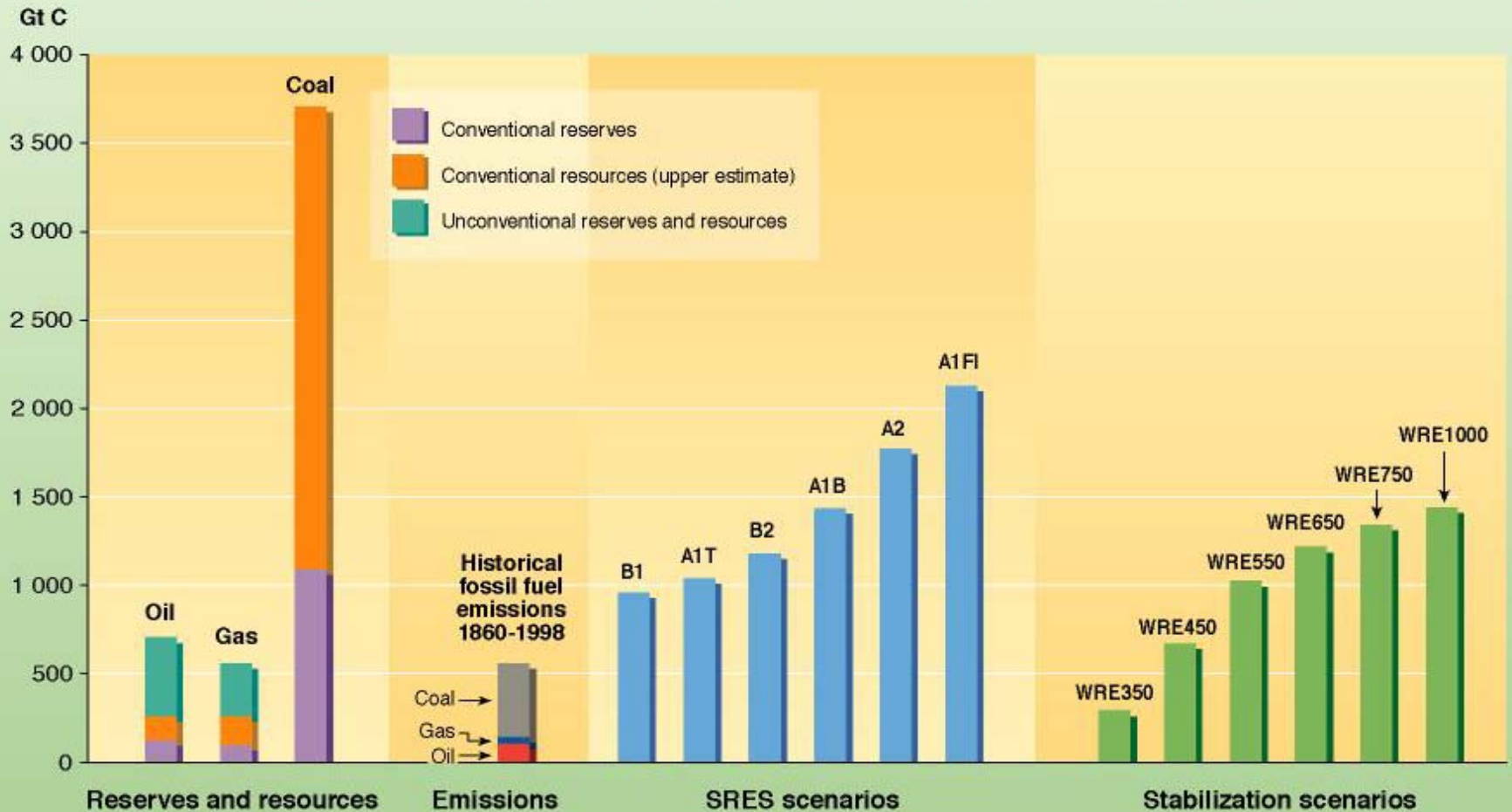
- | | |
|-----|---|
| I | Risks to Unique and Threatened Systems |
| II | Risks from Extreme Climate Events |
| III | Distribution of Impacts |
| IV | Aggregate Impacts |
| V | Risks from Future Large-Scale Discontinuities |

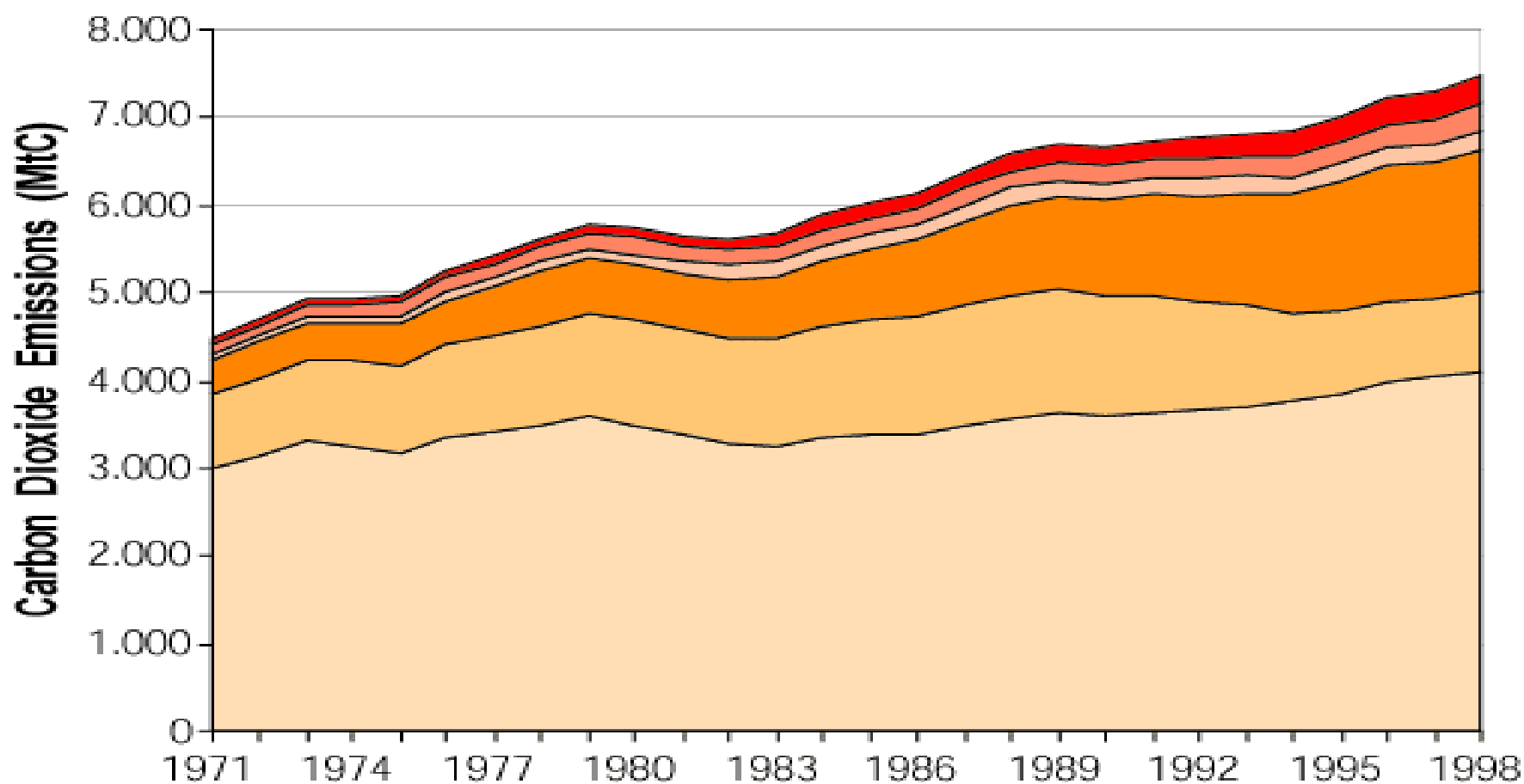


¹ Significant is defined here as more than 40%.
² Based on average rate of sea level rise of 4.2 mm/year from 20



Carbon in fossil fuel reserves and resources compared with historical fossil fuel carbon emissions, and with cumulative carbon emissions from a range of SRES scenario and TAR stabilization scenarios up until 2100





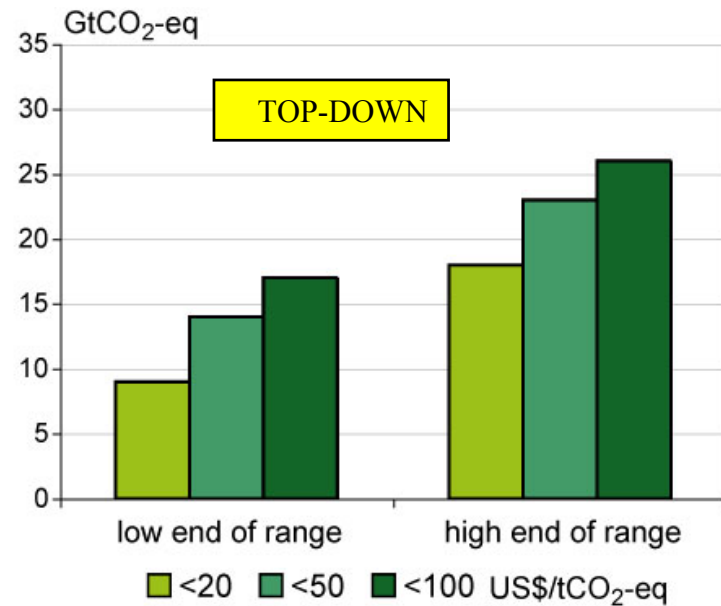
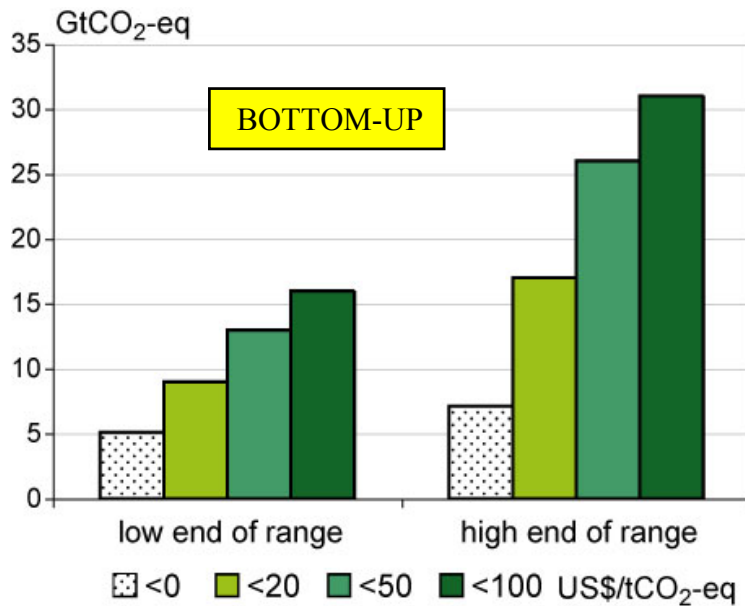
- Middle East
- Latin America
- Africa
- Developing countries in Asia Pacific
- Economies in transition
- Industrialized countries

Mitigation potential

- *Economic potential:*
 - takes into account social costs and benefits and social discount rates,
 - assuming that market efficiency is improved by policies and measures and
 - barriers are removed
- *Market potential:*
 - based on private costs and private discount rates
 - expected to occur under forecast market conditions
 - including policies and measures currently in place
 - noting that barriers limit actual uptake

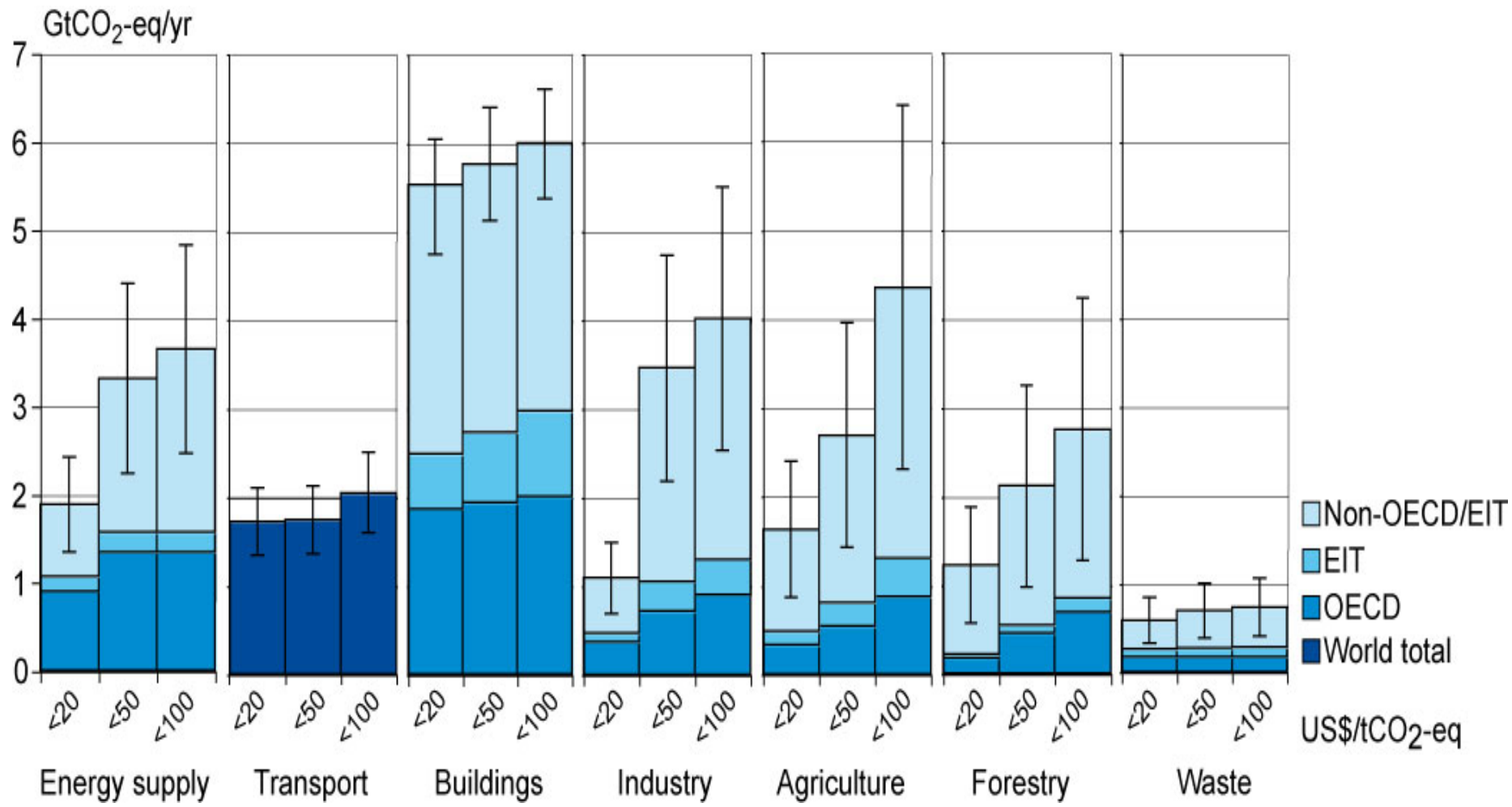
Substantial economic potential for the mitigation of global GHG emissions over the coming decades

- Both bottom-up and top-down studies
- Potential could offset the projected growth of global emissions, or reduce emissions below current levels



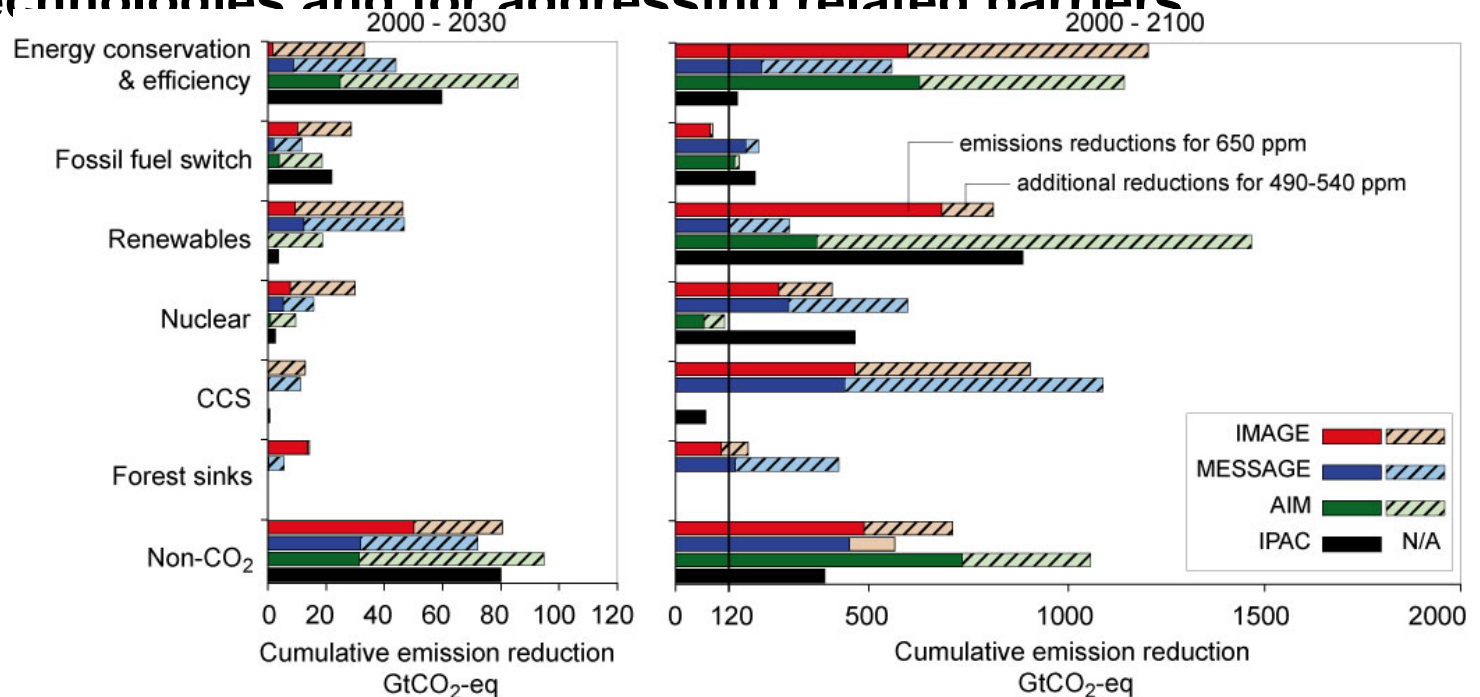
Global economic potential in 2030

Note: estimates do not include non-technical options such as lifestyle changes



Technology

- The range of stabilization levels can be achieved by
 - deployment of a portfolio of technologies that are currently available and
 - those that are expected to be commercialised in coming decades.
- This assumes that appropriate and effective incentives are in place for development, acquisition, deployment and diffusion of technologies and for addressing related barriers



What are the macro-economic costs in 2030?

- Costs are global average for least cost approaches from top-down models
- Costs do not include co-benefits and avoided climate change damages

Trajectories towards stabilization levels (ppm CO ₂ -eq)	Median GDP reduction ^[1] (%)	Range of GDP reduction ^[2] (%)	Reduction of average annual GDP growth rates ^[3] (percentage points)
590-710	0.2	-0.6 – 1.2	< 0.06
535-590	0.6	0.2 – 2.5	<0.1
445-535 ^[4]	Not available	< 3	< 0.12

^[1] This is global GDP based market exchange rates.

^[2] The median and the 10th and 90th percentile range of the analyzed data are given.

^[3] The calculation of the reduction of the annual growth rate is based on the average reduction during the period till 2030 that would result in the indicated GDP decrease in 2030.

^[4] The number of studies that report GDP results is relatively small and they generally use low baselines.

Illustration of cost numbers

