

Every half a degree matters

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Every year matters

Every choice matters

Global Warming of 1.5° C

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valmasdel

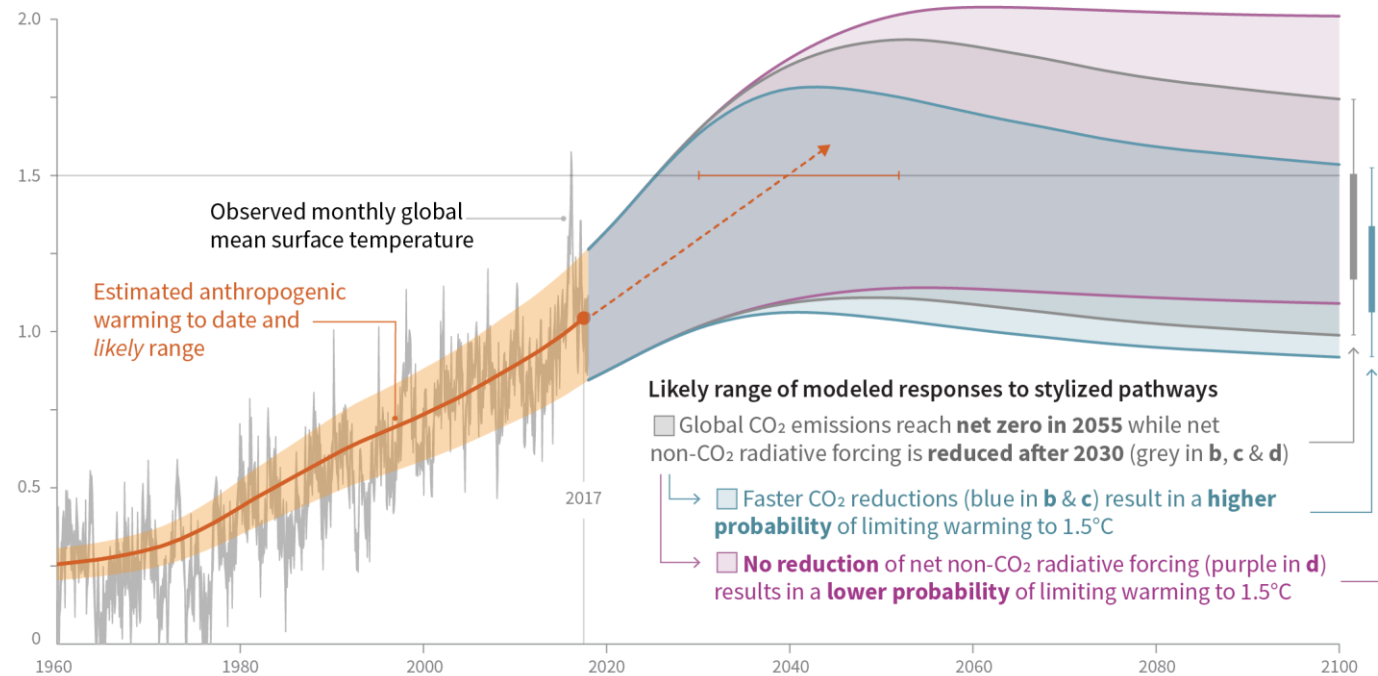
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INTERGOVERNMENTAL PANEL ON climate change



Cumulative emissions of CO₂ and future non-CO₂ radiative forcing determine the probability of limiting warming to 1.5°C

a) Observed global temperature change and modeled responses to stylized anthropogenic emission and forcing pathways

Global warming relative to 1850-1900 (°C)

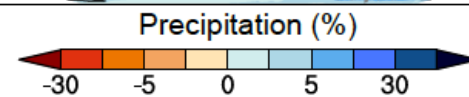
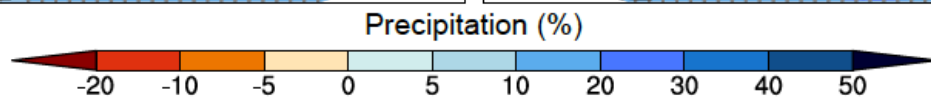
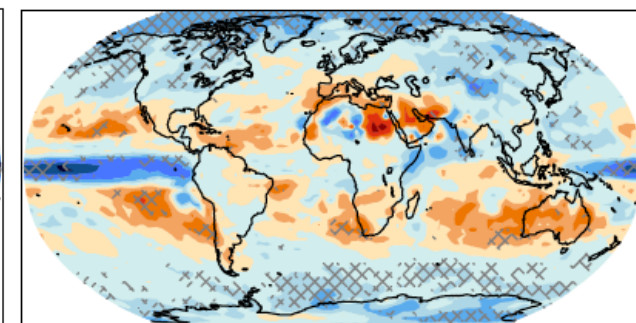
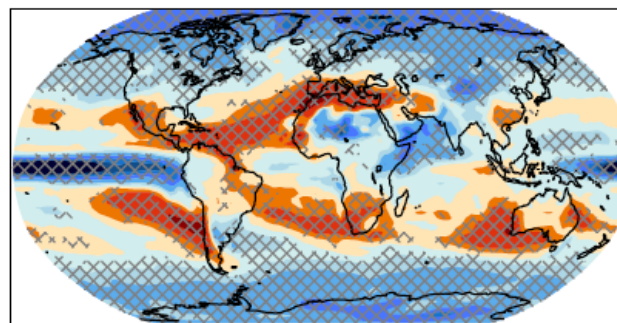
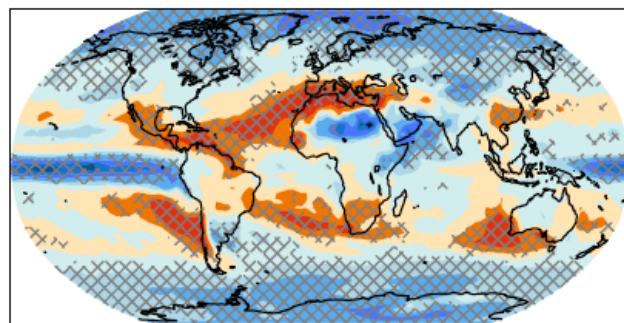
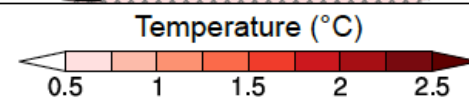
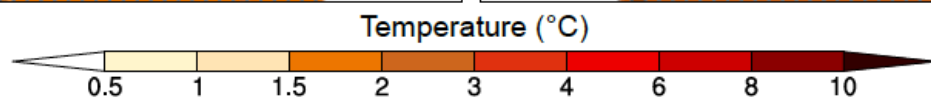
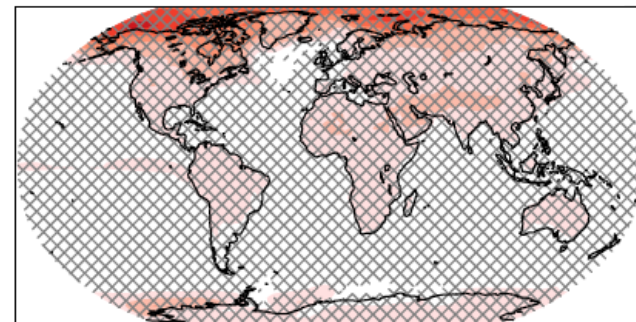
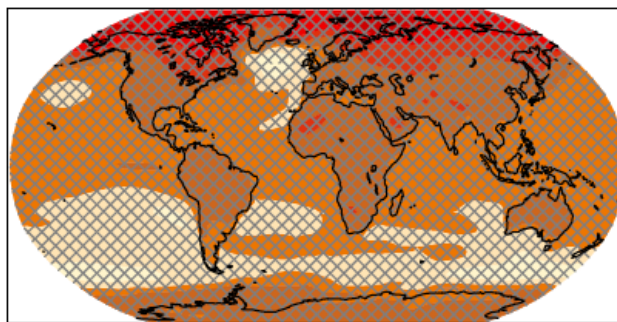
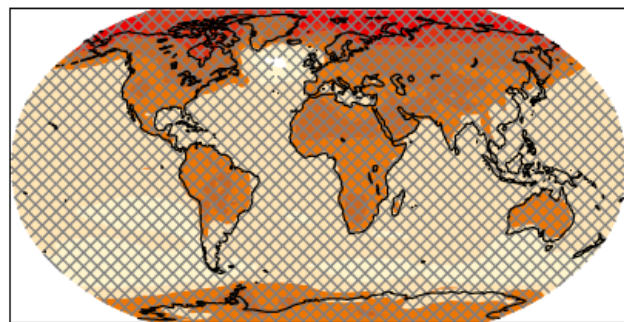


Spatial patterns of changes in mean temperature and precipitation

Global warming of 1.5°C

2°C

Difference



26 CMIP5 models; hatching : 66% model agreement

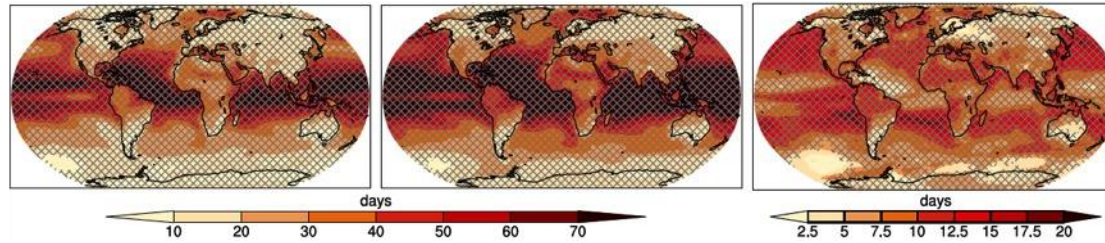
Spatial patterns of changes in extreme temperature and precipitation

Global warming of 1.5°C

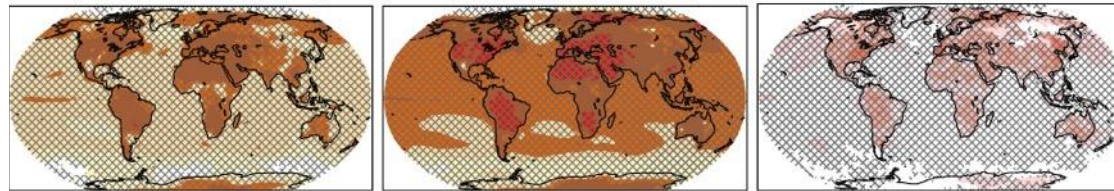
2°C

Difference

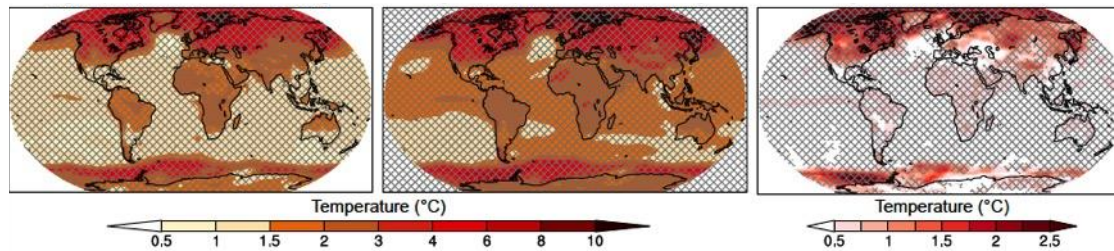
*Number of hot days
(days)*



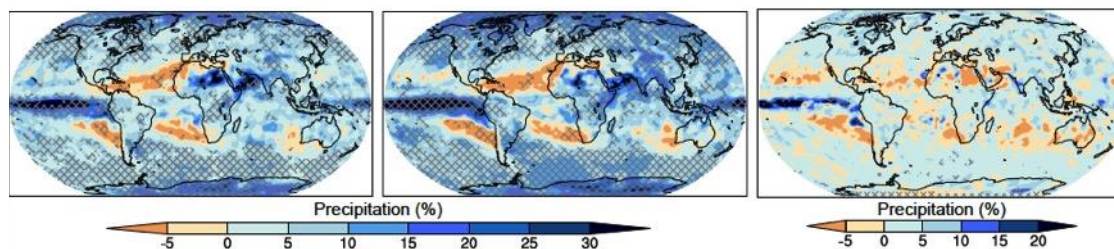
*Temperature of
hottest days (°C)*



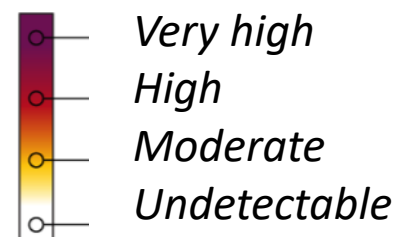
*Temperature of
coldest nights (°C)*



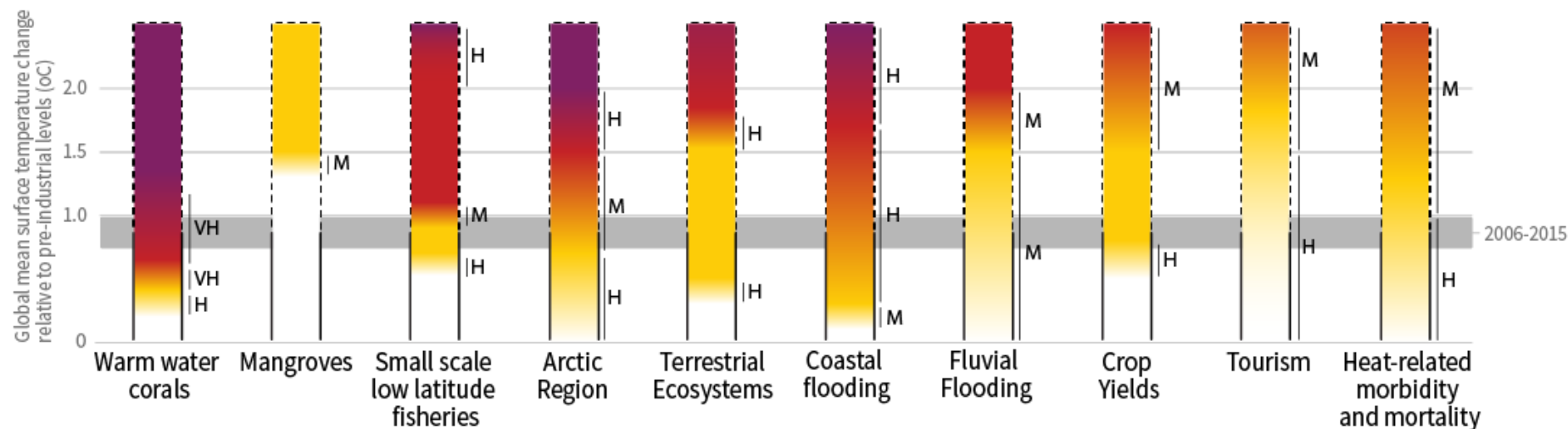
*Extreme
precipitation (%)*



How do climate-related risks change as a function of the level of global warming?



Impacts and risks for selected natural, managed and human systems



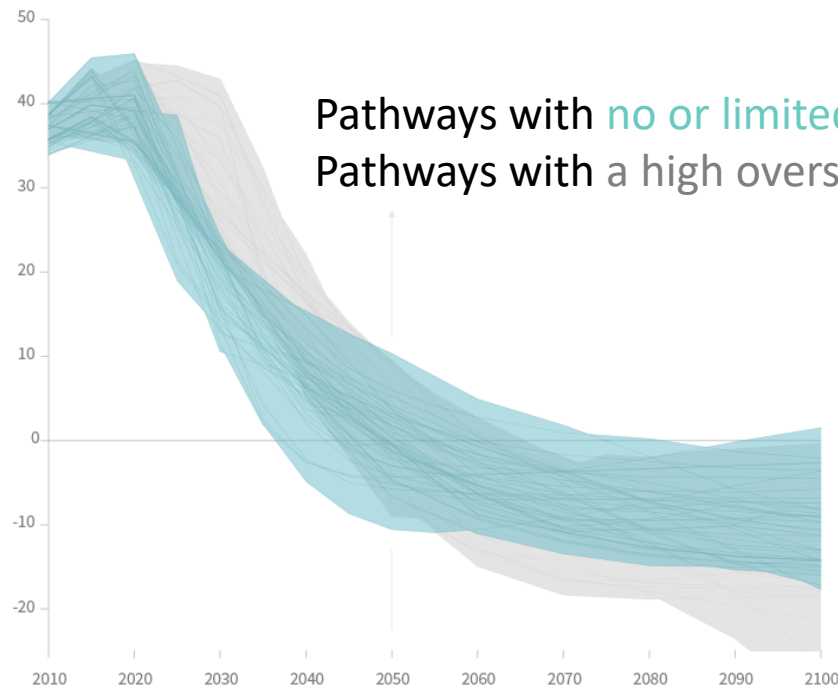
Confidence level : M, medium; H, high; VH; very high

What are greenhouse gas emission pathways compatible with limiting warming to 1.5°C?

Global total net CO₂ emissions

Billion tonnes of CO₂/yr

<https://data.ene.iiasa.ac.at/iamc-1.5c-explorer/>



Timing of net zero CO₂
Line widths depict the 5-95th
percentile and the 25-75th
percentile of scenarios





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