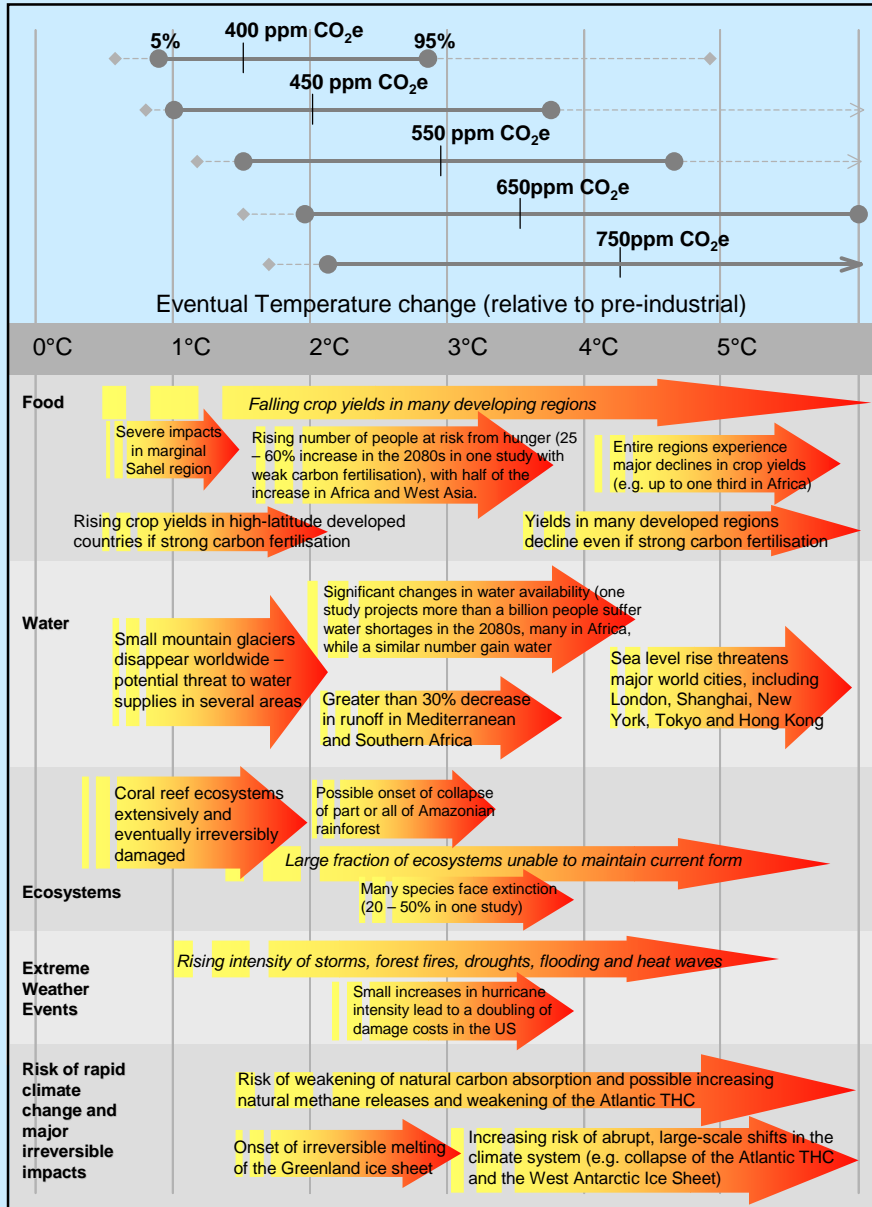


Figure 2 Stabilisation levels and probability ranges for temperature increases

The figure below illustrates the types of impacts that could be experienced as the world comes into equilibrium with more greenhouse gases. The top panel shows the range of temperatures projected at stabilisation levels between 400ppm and 750ppm CO₂e at equilibrium. The solid horizontal lines indicate the 5 - 95% range based on climate sensitivity estimates from the IPCC 2001² and a recent Hadley Centre ensemble study³. The vertical line indicates the mean of the 50th percentile point. The dashed lines show the 5 - 95% range based on eleven recent studies⁴. The bottom panel illustrates the range of impacts expected at different levels of warming. The relationship between global average temperature changes and regional climate changes is very uncertain, especially with regard to changes in precipitation (see Box 4.2). This figure shows potential changes based on current scientific literature.



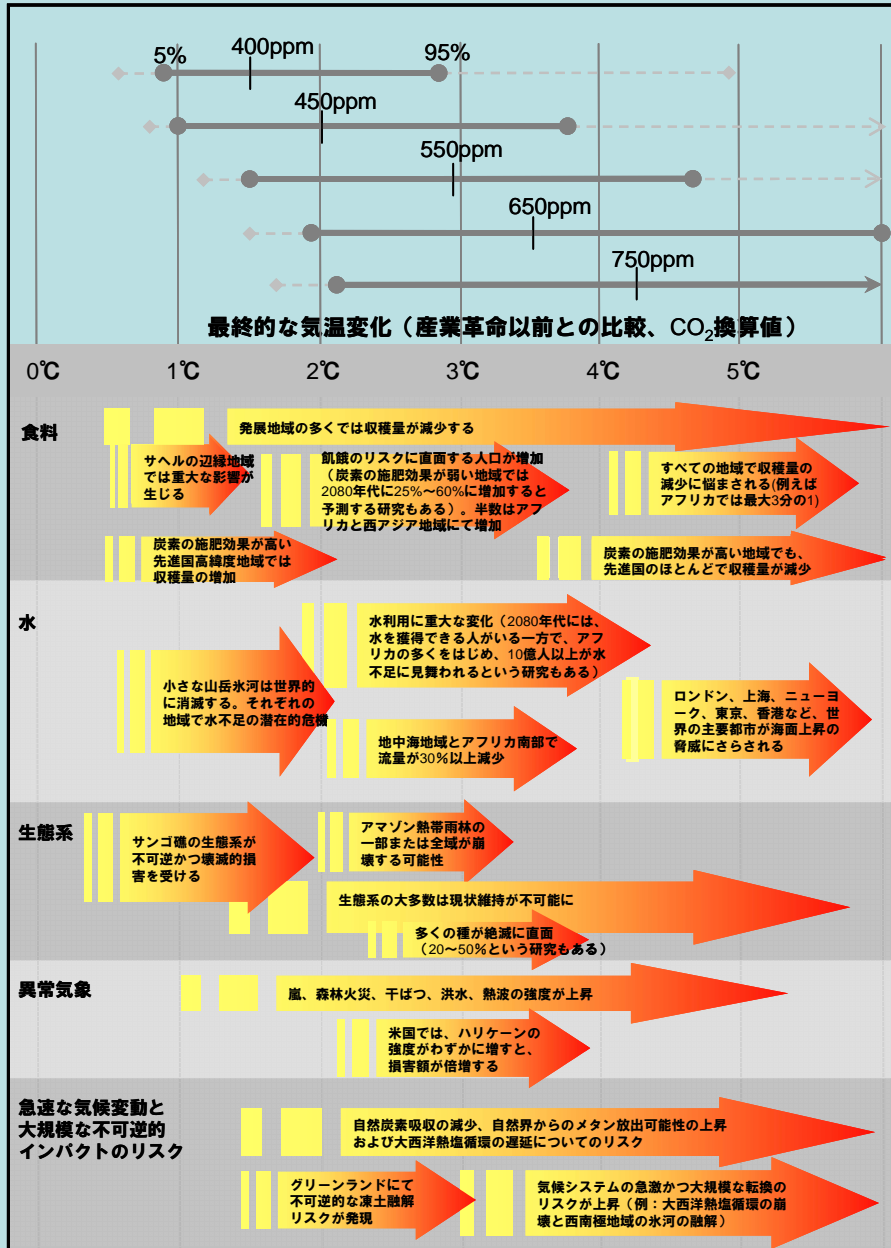
² Wigley, T.M.L. and S.C.B. Raper (2001): 'Interpretation of high projections for global-mean warming', Science **293**: 451-454 based on Intergovernmental Panel on Climate Change (2001): 'Climate change 2001: the scientific basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change' [Houghton JT, Ding Y, Griggs DJ, et al. (eds.)], Cambridge: Cambridge University Press.

³ Murphy, J.M., D.M.H. Sexton D.N. Barnett et al. (2004): 'Quantification of modelling uncertainties in a large ensemble of climate change simulations', Nature **430**: 768 - 772

⁴ Meinshausen, M. (2006): 'What does a 2°C target mean for greenhouse gas concentrations? A brief analysis based on multi-gas emission pathways and several climate sensitivity uncertainty estimates', Avoiding dangerous climate change, in H.J. Schellnhuber et al. (eds.), Cambridge: Cambridge University Press, pp.265 - 280.

図2 安定化レベルと気温上昇幅の確率

下図は、温室効果ガスが今後増加して、ある水準にて安定化した際の、予想される気温変化と世界的な影響をまとめたものである。上部は、CO₂換算400~750ppmの安定化レベルにおけるそれぞれのケースにて予想される気温変化の範囲を示す。水平実線は、IPCC2001²と最新のHadley Centreのアンサンブル実験³によって見積もられた気候感度に基づく5~95%水準を示す。垂直線は平均値を示す。破線は最近の11研究⁴において示された5~95%水準である。下部パネルには、温暖化の影響と気温の関係を示した。全球平均気温の変化と地域的な気候変化との関係は、不確定である。特に、降水量変化に関する不確実性はかなり大きい（本文のBOX4.2参照）。この図は最近の科学論文をもとにして、変化が起こりうる可能性の範囲を示している。



² Wigley, T.M.L. and S.C.B. Raper (2001): 'Interpretation of high projections for global-mean warming', Science 293: 451-454 based on Intergovernmental Panel on Climate Change (2001): 'Climate change 2001: the scientific basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change' [Houghton JT, Ding Y, Griggs DJ, et al. (eds.)], Cambridge: Cambridge University Press.

³ Murphy, J.M., D.M.H. Sexton D.N. Barnett et al. (2004): 'Quantification of modelling uncertainties in a large ensemble of climate change simulations', Nature 430: 768 - 772

⁴ Meinshausen, M. (2006): 'What does a 2°C target mean for greenhouse gas concentrations? A brief analysis based on multi-gas emission pathways and several climate sensitivity uncertainty estimates', Avoiding dangerous climate change, in H.J. Schellnhuber et al. (eds.), Cambridge: Cambridge University Press, pp.265 - 280.