

Climate Models: current science and common sense

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Abstract

Early in the 20th century scientists suggested that human emissions of carbon dioxide could lead to a warmer planet, and that this would result in warmer wetter winters for Europe. Looking back over the last hundred years we see that the Earth has indeed warmed up, and 20th century physical scientists are in broad agreement that much of this warming is indeed due to human activities. As is typically the case, physical science does a much better job explaining the generalities of the past than predicting details of the future. Today's computer graphics look realistic, but how much detail can we count on beyond "warmer wetter winters over Europe"?

So what is a social scientist to do? How can scientists inform climate policy: policy on international agreements limiting future emissions, on stimulating relevant technological development, on disaster aid, ideally on reducing the severity of future disasters caused by weather events? Climate change brings into focus just how deeply social science research is influencing our social, economic and political lives, and how those influences will affect us and future generations.

This event will explore the challenges faced in interpreting developing science to inform action given political realities. Our aim is to exploit the insights of the sciences and the foresight provided by our models (physical, social and economic). We will see how making the best use of the available science requires as much common sense as it does computer simulation.