

1035-37-1423

Emily F Shuckburgh* (emsh@bas.ac.uk), High Cross, Madingley Rd, Cambridge, CB4 3BE, England. *Addressing the key climate questions of the next few decades to inform adaptation strategies and policy.*

As the reality of future climate change becomes more accepted, stakeholders (be they governments, special-interest groups, businesses or individuals) are starting to ask detailed questions about climate change predictions to inform their adaptation strategies, as well as policy. These questions, which are necessarily location and weather-variable specific, push at the limits of our prediction capabilities. There is an increasing pressure on climate scientists to provide ever more detailed regional-scale predictions, to couple climate models with socio-economic and/or ecosystem models, and to provide quantification of the uncertainty of the predictions.

In this talk I will review some of the current developments in climate modeling, focusing on predictions of the next few decades. I will highlight some of the challenges to providing answers to the questions outlined above, and indicate where lessons from dynamical systems research may provide useful input. (Received September 19, 2007)