



climateprediction.net

Strictly embargoed until 00.01 hrs BST Friday 12 September 2003

Do it yourself climate prediction

The world's largest climate prediction experiment will be launched at the Science Museum in London and at the BA Festival of Science in Salford on Friday 12 September 2003. Computer users anywhere in the world can participate by downloading a global climate model from www.climateprediction.net.

This collaboration between the Universities of Oxford and Reading, the Met Office, the Open University, the CCLRC Rutherford Appleton Laboratory, and Tessella Support Services plc will use the combined power of participants' personal computers to generate the world's most comprehensive probability-based forecast of twenty-first -century climate.

Each participant in the experiment runs their own unique version of the Met Office's state-of-the-art climate model, simulating several decades of the Earth's climate at a time. The model runs as a background process on ordinary desktop computers and will not affect other computing tasks. At the end of the experiment results are sent back via the Internet. Simulations of present climate and past changes will be used to test different model versions and the most realistic will be used to predict the climate of the twenty-first century.

Dr Myles Allen of the University of Oxford said: 'Thanks to chaos theory, we can't predict which versions of the model will be any good without running these simulations, and there are far too many for us to run them ourselves. Together, participants' results will give us an overall picture of how much human influence has contributed to recent climate change and of the range of possible changes in the future.'

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David Stainforth, the experiment's chief scientist, said: 'While many model studies in the past have made plausible predictions of climate change, it hasn't been possible to quantify our confidence in these predictions. We hope to be able to say, for the first time, what the climate probably will and, more importantly, probably won't do in the future.'

Dr Jamie Kettleborough from the Rutherford Appleton Laboratory said: 'It's remarkable that the same climate models that were designed only a few years ago to run on the world's best supercomputers can now be run on any up-to-date personal computer, making this experiment possible.'

The *climateprediction.net* experiment also has a strong education component. Professor Bob Spicer, from the Earth Sciences Department at the Open University, said: 'This project is ideal as a source for school and college projects. We're developing web-based educational materials and will be using this project in a short introductory course to climate science. Apart from that, all participants will be able to fly around their programmed planet and watch how weather patterns change.'

Dr Mat Collins from the Met Office said: 'Better assessment of the uncertainties in climate forecasts is a priority for the Met Office and DEFRA. The *climateprediction.net* experiment should give policy makers a better scientific basis for addressing one of the biggest potential global problems of the twenty-first century.'

Mr Kevin Gell, Managing Director of Tessella Support Services, said: 'The success of *climateprediction.net* depends upon the computing power of millions of PCs worldwide. To increase public confidence in the software, our involvement, through the DTI's e-Science programme, not only brings technical expertise and commercial quality standards to the project, but also keeps Tessella at the vanguard of scientific software development.'

For further information please contact Sylvia Knight on 01865 272887 or email sknight@atm.ox.ac.uk or Myles Allen on 01865 272085 or Dave Frame on 01865 272088

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Notes to editors:

- The project will be launched to the public by Howard Dalton, DEFRA Chief Scientist, and Helen Willetts from the BBC weather centre, at the Science Museum's Antenna Gallery between 9-10 am on Friday 12 September. Media are invited to attend. The experiment will remain on show to the public all day.
- The scientific launch of the experiment will be at the BA Festival of Science 2003, University of Salford, during the 'Impacts of Climate Change' session on Friday 12 September, and there will be a briefing on this project in the BA Press Centre in Salford at 9:30a.m. on Thursday, September 11th.
- Anyone wishing to take part can download the necessary software from www.climateprediction.net
- Media who wish to view the software prior to its release on 12 September should go to: www.climateprediction.net/betatry
- *Climateprediction.net* was funded by the Natural Environment Research Council and by the Department of Trade and Industry's e-Science programme.
- Information regarding the participating institutions can be found on the Internet at:

University of Oxford, Atmospheric, Oceanic and Planetary Physics: www.atm.ox.ac.uk

University of Oxford, Computing Laboratory: www.comlab.ox.ac.uk

Rutherford Appleton Laboratory, British Atmospheric Data Centre: www.badc.rl.ac.uk

The Open University, Knowledge Media Institute: kmi.open.ac.uk

The Open University, Earth Sciences Department: www.open.ac.uk/Earth-Sciences

The Met Office: www.metoffice.com

The University of Reading, Department of Meteorology: www.met.rdg.ac.uk

Tessella Support Services plc: www.tessella.com

The BA: www.the-ba.net

The Science Museum: www.sciencemuseum.org.uk