

Global warming making wet winters more likely

May 1 2014, by Alex Peel



That's the conclusion of new research at the University of Oxford, which used spare capacity on thousands of volunteers' home computers to assess how greenhouse-gas emissions influence our weather.

The extra computer power allowed them to run tens of thousands of simulations of possible weather, both with and without the influence of man-made emissions.

Their findings suggest that what would have been a once in a century rainfall event, can now be considered a 1-in-80-year event. In other words, the risk of extreme rainfall in any given winter has risen by 25 per cent. Researchers say it is a modest, but statistically robust rise.

There was some variation in the models, depending on how the pattern

of man-made warming was represented. In some, the likelihood of wet winters showed no change or even went down. But taken as whole, when run with man-made greenhouse gas emissions in the atmosphere, the models favour wetter winters.

The news comes after much of the UK experienced its wettest winter on record in early 2014. As a string of ferocious storms barrelled into Southern England, many rivers across the region swelled to their highest-ever recorded levels. More than 5,000 homes and business were flooded.

Speaking in the House of Commons, Prime Minister David Cameron said he 'very much suspected' that the floods were linked to [climate change](#). The comments sparked a fierce national debate over the issue.

'It will never be possible to say that any specific flood was caused by human-induced climate change,' says Dr Friederike Otto, one of the Oxford researchers involved with the project. 'We have shown, however, that the odds of getting an extremely wet winter are changing due to man-made climate change.'

'Past [greenhouse gas emissions](#) have 'loaded the weather dice' so the probability of the south of England experiencing extremely wet winters again has slightly increased.'

But she cautions against drawing direct conclusions from this about the risk of future flood damage.

'Total winter rainfall, although useful as a benchmark, is not the direct cause of flood damage, so we are working with partners, such as the Centre for Ecology & Hydrology, to explore the implications of our results for river flows, flooding and ultimately property damage,' she adds.

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