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How fast can climate change? Evidence from the past

The world's climate is entering into a period of change described as 'abrupt' (Intergovernmental panel on climate change, 2007).

Unfortunately, we have very few ways of measuring what kind of 'abrupt' change might occur. One source of evidence is past (also called palaeo)

climate, covering a period of time long before weather stations were used, or even invented. The reason we can study this period is because plants,

animals, and all sorts of chemicals have recorded the climate for us. When we dig up these so-called climate proxies to look back, we see horrifying

jumps in climate well beyond that predicted by the most advanced computer models currently used.

This talk will look at how we reconstruct past climate from proxies and how we try and make honest judgements about climate change taking

account of the uncertainty in the measurements we have. We will focus on two sites within Ireland and discuss the implications for Ireland as a whole.