



The Pliocene: The last time Earth had >400 ppm of atmospheric CO₂

Skempton LT201, Skempton Building, Imperial College London, SW7 2BB

Wednesday 3 April 2019, 2.00pm – 6.00pm

The last time carbon dioxide was so plentiful in our planet's atmosphere was in the Pliocene era, around 3 million years ago. Life on Earth was dominated by giant mammals; humans and chimps had shared their last common ancestor. Although the sun's force was about the same, the sea levels were 15 metres higher and Arctic summer temperatures were 14 degrees higher than the present day.

Come to this meeting to hear about the climatic conditions in the Pliocene, how we know this, and what it tells us about our modern climate. If the effects of human-induced climate change are slow to act, or a tipping point is yet to be reached, what does the science tell us to expect?

Meeting Chair – Prof Martin Siebert, Grantham Institute

14.00	Welcome	Prof Martin Siebert Grantham Institute
14.05	The Pliocene: an accessible example of a world in equilibrium with 400 ppmv CO ₂ ?	Prof Alan M. Haywood University of Leeds
14:40	Antarctica during the Pliocene: dynamism, stability and sea level	Prof Dan Lunt ECMWF
15.15	Evidence of Antarctic mass loss from offshore sediments	Prof Tina van der Flierdt Imperial College London
15:50	Refreshment break	-
16.20	Environment on Antarctica from the fossil record	Prof Dame Jane Francis British Antarctic Survey
16.55	What the Pliocene can tell us about the world we are heading toward	Prof Rob DeConto University of Massachusetts-Amherst
17.30	Informal panel discussion, chaired by Prof Siebert	-
17:55	Meeting Close	-

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This meeting is part of the Royal Meteorological Society National Meetings programme, open to all, from expert to enthusiast, for topical discussions on the latest advances in weather and climate. Non-members are welcome to attend these meetings.