

Quaternary Research Association Annual Discussion Meeting

Quaternary Drivers and Responders

The Quaternary is characterised by constant and frequently abrupt change, affecting every corner of the globe and every aspect of environment and life. Nevertheless, how much do we really understand of the natural transformations we infer from the Quaternary record and of their causes? We recognise the clear stamp of Milankovitch cyclicity, a significant change in signal pacing at the Mid-Pleistocene Transition and the more extreme and irregular climatic behaviour of the Late Pleistocene, which expresses itself as abrupt events or transitions. Yet, while much has been learned in recent decades about these processes, linking them explicitly to their environmental manifestations can prove elusive. This meeting will accordingly focus on two key challenges faced by Quaternary Scientists in the 21st century: (1) understanding the drivers behind climate change on a range of scales, and 2) establishing how such events are expressed in, and impact on, ecological, geomorphic and marine systems. A range of keynote speakers will be invited to discuss state-of-the-art understanding of some of the major climatic events and transitions that occurred during the Quaternary, ranging in scale from the mid-Pleistocene transition through to decadal-scale change during the Holocene. Contributions are also encouraged from researchers investigating the impact of these climatic events on any aspect of the Earth system, including the cryosphere, ecosystems, geomorphic processes, the ocean system and human societies, past and present.

In summary, the meeting is open to consideration of change over different timescales (millennial to annual) and to **any aspect of earth surface transformation**, but the focus should be on the wider picture, and on such questions as:

- **What were the mechanisms driving change?**
- **How quickly did processes, landscapes and biota adjust to abrupt environmental shifts?**

Keynote speakers include:

Dominik Fleitmann
University of Reading

Anna Hughes
University of Bergen

Erin McClymont
Durham University

Sune Rasmussen
University of Copenhagen

Eric Wolff
Cambridge University

Centre for Quaternary Research (CQR), Royal Holloway University of London
6th to 8th January, 2016

Further details will be available in due course.