



## **A framework for combining human migration and environmental reconstructions.**

**J.K. Hughes** (1), P.J. Valdes (1), S.J. Mithen (2), B. Sellwood, (2), A. Haywood (3), S. Smith (2).

(1) Bristol Research Initiative for the Dynamic Global Environment (BRIDGE), University of Bristol, UK, (2) School of Human and Environmental Science, University of Reading, UK, (3) School of Earth and Environment, University of Leeds, UK (J.K.Hughes@bristol.ac.uk / Fax: +44 (0)117 928 7878 / Phone: +44 (0) 117 92 88290)

As part of the recent NERC directed research programme, Environmental Factors in the Chronology of Human Evolution & Dispersal (EFCHEd), a framework was developed to integrate state-of-the-art palaeoclimate simulation results with a dispersal model applied to human migrations. This modeling framework incorporated changing patterns of vegetation and sea levels in order to examine the dispersal of *Homo erectus* out of Africa around 2 millions of years ago and to test competing hypotheses. The methodology developed to achieve this and the lessons learnt will be presented, including a series of simulations showing its application to human migrations in the Black Sea region during the last 30 ky.