Interactive comment on “Limitations of red noise in analysing Dansgaard-Oeschger events” by H. Braun et al.

V. Masson-Delmotte (Editor)
valerie.masson@cea.fr

Received and published: 15 October 2009

We now have received two reviews of your manuscript which stress the quality of your approach and the interest of a solid analysis of DO events, and recommend publication in Climate of the Past but after revisions. Following the suggestions raised by the reviewers, I would like to ask you to send a revised manuscript, which is expected to address all the points raised by the reviewer, including a solid description of the conceptual limitations of the approach presented here, and specific clarifications. Moreover, I would like to add two additional requests: - you should refer to the observations of DO events, and explain more clearly the impact of the observation uncertainties in their analysis: importance of dating uncertainties (relevant for the comparison of GISP and NGRIP), importance of temperature reconstructions with respect to stable isotope
records (e.g. Masson-Delmotte et al Clim Past 2006). Figure 1 needs a more detailed caption to describe the proxies and age scales used. - in the perspectives of this study, it would be relevant for the readership of this journal to come back to the data side. In order to test the mechanism which is proposed here (threshold effect and importance of background variability), can you please suggest diagnoses to be conducted on long term DO observations for instance to detect if thresholds are constant under different background conditions (orbital forcing, ice sheet volume, greenhouse gas concentration...).

Interactive comment on Clim. Past Discuss., 5, 1803, 2009.