Interactive comment on “The relative roles of CO$_2$ and palaeogeography in determining Late Miocene climate: results from a terrestrial model-data comparison” by C. D. Bradshaw et al.

A. Sluijs (Editor)
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Dear Dr. Bradshaw,

Your manuscript has been seen by two reviewers, one terrestrial proxy-oriented (Dr. Uhl) and one model/data-model integration oriented (Dr. Herold) scientist. They are generally positive about your contribution. Nevertheless, they raise a number of important points that you need to address before I can accept the manuscript for publication in Climate of the Past. The paper needs moderate revision.

In particular, Dr. Uhl indicated that some of the proxy data you integrate have been assigned different ages in the published papers than you use. I consider this a very
critical point; the quality of a data compilation is as important as quality of raw data. There should be no mistakes in data compilations because many scientists will likely use them without consulting the original literature. Therefore, please check the nature of the proxy data and report them correctly before resubmitting the paper. In addition, the paper would indeed benefit from a separate section on seasonality as Dr. Herold suggests.

The comments by the reviewers are straightforward. Both suggest to significantly shorten sections prior to the results, and I agree that would improve the quality of the paper. Please address all issues they raise in a point-by-point reply.

Some editorial suggestions: * In 2.3, please briefly include a description in the headers for sub-sections (e.g., 2.3.2. TRIFFID Vegetation model) to guide the reader to the section (s)he’s looking for. * Figure 1; section 3.2.6. You could include the recent modeling paper by Van de Wal et al. (http://www.clim-past.net/7/1459/2011/cp-7-1459-2011.html) on CO2 concentrations; it provides a new perspective to the proxy data. * Sustainable Data. Please consider including some of your model outputs in a supplement. See for example a recent paper by Huber and Caballero (http://www.clim-past.net/7/603/2011/cp-7-603-2011.html) in this journal, which includes a 300 Mb zip file comprising raw data for everybody to use. The Copernicus support staff and I would be happy to accommodate this.

Sincerely,

Appy Sluijs Editor

Interactive comment on Clim. Past Discuss., 8, 715, 2012.