**Climate
of the Past**

Discussions

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Interactive comment on "Temperature seasonality in the North American continental interior during the early Eocene climatic optimum" *by* Ethan G. Hyland et al.

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This manuscript is a significant contribution to the field, combining multiple temperature proxies in an interdisciplinary fashion to reconstruct climatic ranges over the EECO. Bringing the focus onto detecting seasonality in the fossil record provides a more nuanced representation of past climates. Palaeobotanical temperature reconstructions are performed using the latest, statistically rigorous methodology, and an important synthesis on state-of-the-art is included. The presentation and quality of the work are excellent. The figures are well-illustrated and comprehensive.

It is a pity that no CMMT (floral) data are available for the peak EECO. In order to

represent this more realistically, I suggest modifying the straight line joining the two CMMT data points, separated by more than 2 Mya, in Figure 4. It could be represented either by a dotted line explained in the figure caption as an aliased signal, or omitted completely. Other relevant points have already been raised by the other reviewer and resolved by the authors. The manuscript is publishable subject to this and the following technical corrections:

1. Line 89: "The GRB sequence is comprised of a series of terrestrial clastic..."

   - Correct to either "sequence is composed of" or "sequence comprises"

2. Supplement, Table C.1:

   - The heading "Floral group" should change to "Taxa"
   - When taxa are only identifiable to genus level, "sp." should be reformatted without italics e.g. *Sabalites* sp.
   - Taxa could be ordered alphabetically for easier future comparisons of floral lists

Interactive comment on Clim. Past Discuss., https://doi.org/10.5194/cp-2018-28, 2018.