Clim. Past Discuss., 11, C1069–C1070, 2015 www.clim-past-discuss.net/11/C1069/2015/ © Author(s) 2015. This work is distributed under the Creative Commons Attribute 3.0 License.



**CPD** 11, C1069–C1070, 2015

> Interactive Comment

## *Interactive comment on* "Early-Holocene warming in Beringia and its mediation by sea-level and vegetation changes" *by* P. J. Bartlein et al.

## Anonymous Referee #2

Received and published: 14 July 2015

I have reviewed this manuscript cp-2015-22 entitled "Early-Holocene warming in Beringia and its mediation by sea-level and vegetation changes" by P.J. Bartlein et al. In this manuscript, the authors use a regional model to assess the impact of changes of topography, sea level, solar radiation, and vegetation types on the climate around Beringia between 11ka and present day. The authors found the sea level change induces the most significant changes of the climate in the Beringia region. Solar radiation changes induce warming in summer and cooling in winter, and also changes of the length of seasons. Other changes would not affect the overall climate much. I found this manuscript is very informative. The authors explained what they have done in very detail. I would like to recommend this manuscript to be accepted with minor revision.

Comment:





1. Since the authors use a regional model, one question I would like to know a bit more is how much the boundary condition changes affect the response studied here. 2. How different of the simulated climate in the regional model in comparison with the global climate?

Interactive comment on Clim. Past Discuss., 11, 873, 2015.

Printer-friendly Version

CPD

11, C1069-C1070, 2015

Interactive Comment

Interactive Discussion

**Discussion Paper** 

