

Interactive comment on "A 900-year New England temperature reconstruction from *in situ* seasonally produced branched glycerol dialkyl glycerol tetraethers (brGDGTs)" *by* Daniel R. Miller et al.

Daniel R. Miller et al.

dmiller@geo.umass.edu

Received and published: 30 April 2018

We would like to thank Dr. Juzhi Hou for the insightful comments on our manuscript. We feel these comments will aid in creating a more well-rounded, thorough publication, and will be addressing these comments in an updated manuscript. One important aspect we would like to note is that comment #1 is already addressed in the supplementary information provided with the manuscript. Although a temperature to MBT transfer function would be ideal, creating a temperature calibration based off of 4 data points (see supplement) would be dubious. However, this point is valid, and we will add

C1

a statement to the manuscript that addresses the promise our data hold for creating such a calibration if more measurements are obtained in the future. We will more explicitly address comment #2 in the revised manuscript, and will clarify the differences and similarities between seasonal temperature reconstructions. Finally, comment #3 regarding the impacts of anthropogenic disturbance on brGDGT-producing communities highlights a question that we did not thoroughly address in the manuscript. In the revision, we will add in a section directly discussing this.

Interactive comment on Clim. Past Discuss., https://doi.org/10.5194/cp-2018-40, 2018.