

Reply to the comments of J.C. Hargreaves

We will like to thank J.C. Hargreaves for the comments on the manuscript. Below follow the reply to J.C. Hargreaves comments.

Comment:

That all the models agree with each other yet disagree with the available data is kind of important(!), so I'm surprised to not find the summary of the model-data comparison in the abstract.

Answer:

In the revised manuscript the abstract has been rewritten and we emphasized more clearly the comparison between models and data.

Comment:

You don't say much about vegetation feedback. Do you think it is unimportant for the sea ice?

Answer:

Previous studies have found that models which included vegetation had a stronger response in temperature in the Northern Hemisphere during the mid-Holocene, so this could in fact be important. This issue is discussed in the revised manuscript.

Comment:

Lastly, there is some evidence for a remnant ice sheet at 6ka, but it is not included in the PMIP protocol. How do you think its existence could affect the results?

Answer:

The existence of remnant ice sheets have an effect on the climate, both by lowering of the planetary albedo and through melt water fluxes into the ocean. This issue is discussed in the revised manuscript.