

September 11, 2014

Response to **S. Zimov**

We are grateful for this reviewer's comments on our manuscript. Based on their comments and suggestions, we have revised our manuscript in an effort to improve it and address their concerns. Below is our response to their main comment (reproduced in bold).

The only thing I would like to suggest to the authors - to add some photos. For big part of science community, thermokarst lakes are unfamiliar.

We thank this reviewer for this suggestion and have added a new figure (Fig. 1) with some photos that exemplify ice-trapped bubbles in thermokarst lakes.

We thank the reviewer for the time and thought they put into reading our manuscript and for their helpful suggestion to add photographs. We hope that our revised manuscript will be considered suitable for publication in *Biogeosciences*.