Utrecht, 27 January 2015

Dear Dr. S. Pantoja,

Thank you for your final comment on our manuscript ‘A laboratory experiment on the behavior of soil-derived core and intact polar GDGTs in aquatic environments’, by F. Peterse, C.M. Moy, and T.I. Eglinton (bg-2014-375). Following your request, we now explicitly mention a) the behavior of soil-derived GDGTs in the control setup using distilled water, and b) the potential masking of aquatic processes influencing the soil-derived abundance and distribution of GDGTs as a result of the higher-than-natural soil:water ratio used in our experiment, in both the abstract and the conclusions. The added sections are highlighted in the hereby submitted version of our manuscript.

We hope that you find this version of our manuscript acceptable for publication in Biogeosciences.

On behalf of the co-authors,

Yours sincerely,

Francien Peterse