

Interactive comment on “Radiative forcings for 28 potential Archean greenhouse gases” by B. Byrne and C. Goldblatt

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Dear Dr Byrne,

based on the reviews of your manuscript and on my own reading, I think that your manuscript deserves publication. However, both reviewers raised points that must be addressed in the revised version of your manuscript. More specifically:

1) your study encompasses a large number of greenhouse gases. As you did not calculate the possible abundance of these 28 greenhouse gases (I fully understand that this is not the objective of your contribution), it would be useful for the readers to identify which of those gases have been suggested as potential key factor for the Archean climate. This could be easily done in the form of a table with the references

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from the literature.

2) given the bias in the geological record, it is probably not true to state that glaciations were almost absent in the Archean.

3) the discrepancy with the study of Ueno et al. must be explained.

4) all the other comments from both reviewers are equally relevant. Please consider them in your revised submission.

Waiting for your revised manuscript. Best regards.

Interactive comment on Clim. Past Discuss., 10, 2011, 2014.

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