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Climate of the Past Discussions

Interactive comment on "Deglacial carbon cycle changes observed in a compilation of 117 benthic δ^{13}C time series (20–6 ka)" *by* Carlye Peterson and Lorraine Lisiecki

Carlye Peterson and Lorraine Lisiecki

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Dear Carlye and Lorraine,

I have missed the discussion phase of your CPD paper

Peterson, C. and Lisiecki, L.: Deglacial carbon cycle changes observed in a compilation of 117 benthic δ13C time series (20-6âĂŁka), Clim. Past Discuss., https://doi.org/10.5194/cp-2018-25, in review, 2018.

Therefore, I like to give you 1 comment via email:

When comparing Dd13C with CO2 (your figs 7, A1c) you might consider the CO2

stack I compiled last year, since I tried to find an objective way to deal with the offsets between the different ice cores and used the most recent age models. Maybe you might also prefer our calculated spline for your comparison.

Köhler, P., Nehrbass-Ahles, C., Schmitt, J., Stocker, T. F., and Fischer, H.: A 156âĂŕkyr smoothed history of the atmospheric greenhouse gases CO2, CH4, and N2O and their radiative forcing, Earth Syst. Sci. Data, 9, 363-387, https://doi.org/10.5194/essd-9-363-2017, 2017. (link to data in the abstract).

Looking forward for your final paper. Best Peter

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Our response: We thank Peter Köhler for his suggestion to use the CO2 compilation from his 2017 paper to compare against our δ13C stacks. We have compared the δ13C stacks to the Köhler 2017 CO2 compilation, and it produces very similar correlation coefficients as the spliced CO2 record used in our original draft. Therefore, we plan to revise the manuscript using Kohler's CO2 compilation.

Interactive comment on Clim. Past Discuss., https://doi.org/10.5194/cp-2018-25, 2018.