

## ***Interactive comment on “Young People’s Burden: Requirement of Negative CO<sub>2</sub> Emissions” by James Hansen et al.***

**James Hansen et al.**

jeh1@columbia.edu

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Thank you for these suggestions.

There are several important recent papers on methane measurements and analysis including the implications of isotope data for source identification. We discuss these in our revised manuscript, but nevertheless the cause(s) of the recent reacceleration of atmospheric methane growth remain unclear. See especially: <http://www.globalcarbonproject.org/methanebudget/index.htm>

Thanks for pointing out the failure to include the Warwick paper in our reference list. Apologies for also failing to include the Levermann et al. paper. Here they are:

Warwick, N.J., Cain, M.L., Fisher, R., France, J.L., Lowry, D., Michel, S.E., Nisbet, E.G.,

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Vaughn, B.H., White, J.W.C. and Pyle, J.A.: Using  $\delta^{13}\text{C}\text{-CH}_4$  and  $\delta\text{D}\text{-CH}_4$  to constrain Arctic methane emissions, *Atmos. Chem. Phys. Discuss.*, doi:10.5194/acp-2016-408, 2016.

Levermann, A., Clark, P.U., Marzeion, B., Milne, G.A., Pollard, D., Radic, V., and Robinson, A.: The multimillennial sea-level commitment of global warming, *Proc. Natl. Acad. Sci. USA*, published online, doi:10.1073/pnas.1219414110, 2013.

The Lawrence et al paper that you recommend has been retracted.

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Interactive comment on *Earth Syst. Dynam. Discuss.*, doi:10.5194/esd-2016-42, 2016.

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