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References used in replies to reviewers' comments

Shuang Ma et al.

Author comment on "Evaluating alternative ebullition models for predicting peatland methane emission and its pathways via data–model fusion" by Shuang Ma et al.,
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Krüger, M., Eller, G., Conrad, R., & Frenzel, P. (2002). Seasonal variation in pathways of CH₄ production and in CH₄ oxidation in rice fields determined by stable carbon isotopes and specific inhibitors. *Global Change Biology*, 8(3), 265–280.
<https://doi.org/https://doi.org/10.1046/j.1365-2486.2002.00476.x>

Happell, J. D., Chanton, J. P., Whiting, G. J., & Showers, W. J. (1993). Stable isotopes as tracers of methane dynamics in Everglades marshes with and without active populations of methane oxidizing bacteria. *Journal of Geophysical Research: Atmospheres*, 98(D8), 14771–14782. <https://doi.org/https://doi.org/10.1029/93JD00765>

Hodgkins, S. B., Chanton, J. P., Langford, L. C., Mccalley, C. K., Saleska, S. R., Rich, V. I., et al. (2015). Soil incubations reproduce field methane dynamics in a subarctic wetland. *Biogeochemistry*, 126(1), 241–249. <https://doi.org/10.1007/s10533-015-0142-z>

Wilson, R. M., Tfaily, M. M., Kolton, M., Johnston, E. R., Petro, C., Zalman, C. A., et al. (2021). Soil metabolome response to whole-ecosystem warming at the Spruce and Peatland Responses under Changing Environments experiment, 118(25), 1–11.
<https://doi.org/10.1073/pnas.2004192118>

Holmes, M. E., Chanton, J. P., Tfaily, M. M., & Ogram, A. (2014). Global Biogeochemical Cycles. <https://doi.org/10.1002/2014GB004951>.Received

Hines, M. E., Duddleston, K. N., Rooney-Varga, J. N., Fields, D., & Chanton, J. P. (2008). Uncoupling of acetate degradation from methane formation in Alaskan wetlands: Connections to vegetation distribution. *Global Biogeochemical Cycles*, 22(2), 1–12.
<https://doi.org/10.1029/2006GB002903>

Walter, K. M., Chanton, J. P., Chapin, F. S., Schuur, E. A. G., & Zimov, S. A. (2008). Methane production and bubble emissions from arctic lakes: Isotopic implications for source pathways and ages. *Journal of Geophysical Research: Biogeosciences*, 113(3).
<https://doi.org/10.1029/2007JG000569>

Chanton, J. P., Glaser, P. H., Chasar, L. S., Burdige, D. J., Hines, M. E., Siegel, D. I., et al. (2008). Radiocarbon evidence for the importance of surface vegetation on fermentation

and methanogenesis in contrasting types of boreal peatlands. *Global Biogeochemical Cycles*, 22(4), 1–11. <https://doi.org/10.1029/2008GB003274>

Keller, J. K., Weisenhorn, P. B., & Megonigal, J. P. (2009). Humic acids as electron acceptors in wetland decomposition. *Soil Biology and Biochemistry*, 41(7), 1518–1522. <https://doi.org/10.1016/j.soilbio.2009.04.008>

Itoh, M., Ohte, N., Koba, K., Sugimoto, A., & Tani, M. (2008). Analysis of methane production pathways in a riparian wetland of a temperate forest catchment, using $\delta^{13}\text{C}$ of pore water CH_4 and CO_2 . *Journal of Geophysical Research: Biogeosciences*, 113(3), 1–16. <https://doi.org/10.1029/2007JG000647>

Verry, E. S., Brooks, K. N., Nichols, D. S., Ferris, D. R. & Sebestyen, S. D. Watershed Hydrology, in Peatland Biogeochemistry and Watershed Hydrology at the Marcell Experimental Forest (eds Kolka, R. K. et al.) 193–212 (CRC Press, Boca Raton, FL, 2011).

Liang, J., Xia, J., Shi, Z., Jiang, L., Ma, S., Lu, X., et al. (2018). Biotic responses buffer warming-induced soil organic carbon loss in Arctic tundra. *Global Change Biology*, 24(10), 4946–4959. <https://doi.org/doi:10.1111/gcb.14325>

Luo, Y., Ahlström, A., Allison, S. D., Batjes, N. H., Brovkin, V., Carvalhais, N., Chappell, A., Ciais, P., Davidson, E. A., Finzi, A., et al. (2016), Toward more realistic projections of soil carbon dynamics by Earth system models, *Global Biogeochem. Cycles*, 30, 40– 56, doi:10.1002/2015GB005239.

Xu, T., White, L., Hui, D., & Luo, Y. (2006). Probabilistic inversion of a terrestrial ecosystem model: Analysis of uncertainty in parameter estimation and model prediction. *Global Biogeochemical Cycles*, 20(2), 1–15. <https://doi.org/10.1029/2005GB002468>