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Interactive comment on "Winter observations of CO_2 exchange between sea-ice and the atmosphere in a coastal fjord environment" *by* J. Sievers et al.

J. Sievers et al.

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As recommended by the handling editor of the paper in question I would like to quickly clarify the issue of an alleged sensor heating problem:

The reviewer appears to have misunderstood which instrument is being used. Rather than an LI-7500, for which heating-issues are discussed by Burba et al. (2008), we are using an LI-7500A. This instrument has a cold-climate setting which has been shown to reduce false uptake hours to within the standard of an LI-7200 closed path system in environments as cold as -25 degrees (Burba et al., 2012). A comparison of the LI-7200 and LI-7500A system was not possible during this experiment but as none of the

fluxes reported here were attained during conditions colder than -25 degrees, we feel confident that the flux estimates does in fact reflect actual conditions on the sea-ice.

REFERENCES:

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Burba, G. G., McDermitt, D. K., Grelle, A., Anderson, D. J., and Xu, L. K.: Addressing the influence of instrument surface heat exchange on the measurements of CO(2) flux from open-path gas analyzers, Glob Change Biol, 14, 1854-1876, DOI 10.1111/j.1365-2486.2008.01606.x, 2008.

Interactive comment on The Cryosphere Discuss., 9, 45, 2015.