

Interactive comment on “The effect of a permafrost disturbance on growing-season carbon-dioxide fluxes in a high Arctic tundra ecosystem” by A. E. Cassidy et al.

Anonymous Referee #2

Received and published: 12 January 2016

This is a well thought out and executed study, and well written. However, I'm a bit concerned about the actual eddy covariance NEP data because the authors used LICOR 7500 open path CO₂ sensors. As far as I can tell, no attempt was made to correct for the well-documented heating issues that these open path 7500 sensors have, especially in places where temperatures are cold (i.e., their site). The heating issues result in exaggerated CO₂ uptake rates, which can be particularly important in regions where NEP is already extremely low. There are publications that advice how to best deal with this issue (e.g., Burba GG, McDermitt DK, Grelle A, Anderson DJ, Xu L (2008) Addressing the influence of instrument surface heat exchange on the measurements of CO₂ flux from open-path gas analyzers. *Global Change Biology*, 14, 1854–1876).

C9001

Can the authors please address this prior to the final publication of this article. It's very important!

Interactive comment on Biogeosciences Discuss., 12, 19781, 2015.

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