## *Interactive comment on* "Quantifying the impact of emission outbursts and non-stationary flow on eddy covariance CH$_4$ flux measurements using wavelet techniques" *by* Mathias Göckede et al.

**Gil Bohrer (Referee)**

bohrer.17@osu.edu

Received and published: 22 April 2019

I reread the paper. Got stuck on the last section of the methods where you say "Mexican hat wavelet" was used to determine bursts. That made me realize that I do not actually have a sense of what you are doing and how.

I think it'll be of great advantage for science, and the readers of Biogeosciences that you will post the code that you used to conduct the wavelet analyses, both for determining the flux, and for identifying bursts (I assume these are similar codes, with different setups, but may be wrong). A clear, well commented code, with a data example from your own study will go a long way in terms of applicability and citation number for this

paper.

Also (assuming your code is in R) consider making an R package and posting it in CRAN. But if that is too much of an effort, or if most of what you used is from other packages and all you did was set up and wrap up, please, at least, post the code with a working data example as appendix to this paper. Having a working example of how wavelet is used to determine fluxes from heterogeneous environments, and identify bursts would be great.

Interactive comment on Biogeosciences Discuss., https://doi.org/10.5194/bg-2019-92, 2019.