Biogeosciences Discuss.,
doi:10.5194/bg-2017-58-RC3, 2017

Biogeosciences Discussions
Open Access
EGU

Interactive comment on "Daily variation in net primary production and net calcification in coral reef communities exposed to elevated pCO_2" *by* Steeve Comeau et al.

Anonymous Referee #2

Received and published: 26 April 2017

p.s. The more I think about it, the more concerned I am that we, as a field, might be missing some really important changes if we are measuring Pnet via O2 flux only or DIC flux only. The photosynthetic quotient does appear to be quite (potentially) labile for reef organisms, and probably for many others. In this study, Pnet can only be estimated via O2 flux, not DIC flux, but as work by Langdon and Atkinson (2005) shows, examining one paramter or the other can yield radically different conclusions about how Pnet may or may not change under perturbation. The authors acknowledge and discuss this issue, but I would encourage them to emphasize the issue to a much greater extent–this question probably should dictate how the field measures Pnet going forward (both O2 flux and DIC flux, ideally), and the authors have an excellent opportunity to

Printer-friendly version

Discussion paper

make that case here.

Interactive comment on Biogeosciences Discuss., doi:10.5194/bg-2017-58, 2017.

Printer-friendly version

Discussion paper