

Interactive comment on “Carbon stocks and soil sequestration rates of riverine mangroves and freshwater wetlands” by M. F. Adame et al.

Anonymous Referee #2

Received and published: 23 March 2015

General comments As stated by Referee #1, Adame and coauthors provide mostly a “very descriptive place-based study” of mangrove forests, one peat swamp site, and one marsh site in the La Encrucijada Biosphere Reserve (LEBR). However, the study does provide a useful and needed inventory of carbon stocks and soil C sequestration rates for LEBR. In agreement with Referee #1, additional analyses need to be performed to better address the uncertainty in C stocks and C sequestration rates across the LEBR. For instance, the two class 2 mangrove forest sites exhibit very different C stocks. This uncertainty needs to be addressed in computing the carbon budget for Class 2 mangrove forests across the LEBR. Also, Class 3 mangrove forests cover a large range of NDVI (0.1 to 0.632), and this likely contributes to additional uncertainty in the total carbon budget of LEBR. What are the NDVI values of the two Class 3 sites? If, for instance, the NDVI values are near the upper bound (0.632) for Class 3, then

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



biomass estimates using only these two sites may represent an overestimate. Again, some justification and additional uncertainty analysis is warranted here.

Specific comments p.1016 l.17 – The units should be in Mg C and the uncertainty should be much higher (more than 10% of the mean value of 27762 Mg C). p.1027 l.8-9 – The text should read something like, “C stock of mangrove forests of LEBR to be 20.9×10^6 Mg of C. “ p.1030 l.19 – should read, “forests of Chiapas. . .” p.1030 l.24 – should read, “. . .designed the project, led the field campaign,. . .”

Interactive comment on Biogeosciences Discuss., 12, 1015, 2015.

BGD

12, C743–C744, 2015

Interactive
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper