

Interactive comment on “A cost-efficient method to assess carbon stocks in tropical peat soil” by M. W. Warren et al.

Anonymous Referee #2

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This study offers a simplified method of assessing peat C stock based on peat bulk density profile with a generalized value of carbon content. Considering the large spatial and vertical variation of soil organic C content (as mentioned in page 7054, lines 11–13), it's advisable to elaborate how far can this method be used. Whether application of the method for assessing carbon stock change (CO₂-e emission) is acceptable, if so at what Tier?

Abstract

Line 19: Good to add to add implication for C stock change (emission) assessment.

Introduction

Page 7052, Line 4: Is tropical cyclone and sea level rise have anything to do with C
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pools? Explain if any, or omit.

Add somewhere in the Introduction and/or Discussion how does this method compare with the subsidence method, e.g. the recent study by Hooijer et al. (2012).

Methods

Page 7057, line 19: Mention if you leave out data of very low C content which do not meet peat soil criteria. It's good to treat samples with very low C content (such as those at the transition between peat and the underlying mineral layer) separately for estimating Cd.

Page 7057, line 19: Change 48.59% to 49%, Similar comment for Table 3, column 3, 4, 5 and 6.

Discussion

Explain how reliable this method is to estimate C stock change (emission rate) from different land uses or from land use that change to other land use.

Page 7060, Line 8: Insert the subsidence study of Hooijer et al. (2012).

References

Hooijer, A., Page, S. E., Jauhiainen, J., Lee, W. A., Lu, X. X., Idris, A., & Anshari, G. 2012. Subsidence and carbon loss in drained tropical peatlands. *Biogeosciences*, 9, 1053–1071.

Interactive comment on *Biogeosciences Discuss.*, 9, 7049, 2012.