

Interactive comment on “Emission of atmospherically significant halocarbons by naturally occurring and farmed tropical macroalgae” by E. C. Leedham et al.

Anonymous Referee #1

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This study contributes an important, novel contribution about the biogenic origin of halocarbons from seaweeds in tropical South-East Asia and the modelling / extrapolation of the regional and global significance of these emissions.

The scientific approach and applied methods are valid. The results are discussed in an appropriate and balanced way, and references are appropriate.

The presentation of results and conclusions is clear and concise.

Minor points are listed below.

I would recommend accepting this paper with minor revisions.

C180

p. 484, l. 16 – insert “and elsewhere” before “South East Asia”

p. 485, l. 9-12: Halocarbons cannot act as antioxidants themselves, but they may be the reaction products of the antioxidant function of iodide or possibly also bromide, catalyzed by haloperoxidase (this is what the papers by Palmer and Kuepper say).

p. 486, l. 29: Kelps occur in probably a large number of tropical locations, but in deeper waters (cf. Graham et al., 2007, PNAS)

References (throughout) – species names should be italicized

p. 512, l. 17 – the author list of the reference of Carpenter et al. (2000, GBC) is incomplete.

T3 – the labeling is confusing / misleading! Halides were not actually measured in this study. I would say, “halogens”.

Interactive comment on Biogeosciences Discuss., 10, 483, 2013.

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