Interactive comment on “Sources of short-lived bromocarbons in the Iberian upwelling system” by S. Raimund et al.

Anonymous Referee #1

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This manuscript appears to still be at the level of a first draft, and is by not remotely ready for submission to a scientific journal. Before it is reviewed for its scientific content it should be carefully read by all of its authors. Thorough rewriting to give clear expression of its arguments should also result in a substantially shorter manuscript.

A few examples of the poor expression of ideas are:

Page 11. Hill and Manley (2009) implicated halocarbon production with temperature adaptation of phytoplankton species:

Page 11. Although bromocarbon concentrations were comparatively low and thus the putative [sic] role of phytoplanktonic production less important, we found evidences for a weak phytoplanktonic source in our studied area.
However, sources for the Iberian upwelling seem to be higher than those for the Mauritanian upwelling since CH2Br2 and CHBr3 values were significantly lower off Mauritania coast.

Integrated values of CHBr3 for the entire upwelling (30 pmol L-1) were one order of magnitude lower than for other productive coastal areas and hence do not support the fact that upwelling regions are pronounced “hot spots” for halocarbon formation, as previously assumed.

Regardless of the purpose of halocarbon the metabolic pathway within phytoplankton seems to be preferable for CHBr3 and CH2Br2.

Thus, the above comparison of different studies only roughly enables to identify tendencies of local source strengths.

The day time showed significant effects on most brominated halocarbon concentrations.

Abstract: Coastal sources and transport can be accounted for maximum values of up to 185.1 pmol L-1 CHBr3.