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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Coastal measurements of short-lived reactive iodocarbons and bromocarbons at Roscoff, Brittany during the RHaMBLe campaign" *by* C. E. Jones et al.

C. E. Jones et al.

cej103@york.ac.uk

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1). While the water samples were stored at 3 °C prior to analysis, the purge and trap system itself was actually heated to $\sim$ 50 °C. Both the sparging temperature and time are given in the manuscript (originally P17130 L16-17). We acknowledge that it will likely take a few minutes for the water temperature itself to reach 50 °C, but, in response to another point made by the reviewer, the sparge time we use is 50 minutes, and validation experiments carried out in the lab have shown that these conditions give sparging efficiencies of >95 % for all halocarbons measured here.

2). We acknowledge that the 0.45 um filters would not remove all of the bacteria from

the samples, which is the reason for the low storage temperature - to attempt to minimize any biological activity from the small number of organisms remaining. They would however remove the majority of phytoplankton species which, after macrocalgae, are believed to be the most prolific halocarbon-producing organisms in seawater. We also noted that the samples were stored in the dark to prevent any photochemical production or destruction taking place.

We have included a statement referring to the effect of storing water samples prior to analysis and reported the variability we have observed in storage tests. Tests carried out during previous campaigns have shown that storing water samples in this way for a period of several hours resulted in a variation of the measured concentrations of between 4-19 %, which is not far outside the uncertainty associated with the analytical procedure itself.

3). Estimating the fluxes necessary to sustain the observed midday concentrations of CH2I2 and CH2IBr is not a straightforward calculation - requiring the use of a 1-D model to determine the rate of mixing throughout the boundary layer and derive a vertical concentration profile for each gas. This is beyond the scope of this measurement paper.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 17125, 2009.