Atmos. Chem. Phys. Discuss., 9, C9586–C9587, 2010 www.atmos-chem-phys-discuss.net/9/C9586/2010/ © Author(s) 2010. This work is distributed under the Creative Commons Attribute 3.0 License.



## **ACPD**

9, C9586-C9587, 2010

Interactive Comment

## Interactive comment on "Reactive Halogens in the Marine Boundary Layer (RHaMBLe): the tropical North Atlantic experiments" by J. D. Lee et al.

J. D. Lee et al.

g.mcfiggans@manchester.ac.uk

Received and published: 12 January 2010

We'd like to thank the reviewers for their overwhelming support for the paper. We only have a few minor comments in reply to those of the second reviewer:

i) In the introduction we fully reflect what we believe to be the state of the science with respect to halogen cycling. Indeed the discussion of the background to marine halogen starts by stating that "The primary source of reactive inorganic Cl and Br in marine air is the production of sea-salt aerosols by waves breaking at the ocean surface..." and continues by discussing the methods of halogen activation from seasalt aerosol and consequent halide depletion. We realise that we omitted to reference the O'Brien study in section 3.5 but have stated, correctly we believe, that "It is unclear whether such XO levels are supported by the calculated sea-air flux of halocarbons and this is the subject

Full Screen / Esc

**Printer-friendly Version** 

Interactive Discussion

Discussion Paper



C9586

of current investigation...". However, we now include a reference to the O'Brien et al, 2009 study.

- ii) ppt and ppb all changed to pptv and ppbv (in addition, at first use it is stated that 1 ppbv is equivalent to 1 nmol/mol),
- iii) the second  $O_3$  has been deleted,
- iv) diel changed to diurnal,
- v) reference to Figure 15a corrected,
- vi) reference to Figure 15b corrected,
- vii) panel labels added to figure 13.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 21717, 2009.

## **ACPD**

9, C9586-C9587, 2010

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

