

***Interactive comment on “Bromine and iodine chemistry in a global chemistry-climate model: description and evaluation of very short-lived oceanic sources” by C. Ordóñez et al.***

**L.J. Carpenter**

ljc4@york.ac.uk

Received and published: 18 October 2011

I enjoyed reading this manuscript – it is excellent to see this progress towards global modelling of VSL halocarbons.

I have just a couple of comments –

1. The model underestimates the observations of CH<sub>2</sub>I<sub>2</sub>. What is the vertical resolution of the model at the surface? CH<sub>2</sub>I<sub>2</sub> will obviously have a strong vertical profile so vertical resolution/mixing issues will effect the model-measured agreement. In Jones et al., (2010), the 1D MISTRA model successfully simulated day-time atmospheric observations of CH<sub>2</sub>I<sub>2</sub> and CH<sub>2</sub>ICl.

C10526

2. The assumed CH<sub>3</sub>I global budget of around 300 Gg yr<sup>-1</sup> (from Bell et al., 2002) is on the low side, according to a more recent assessment (e.g. Butler et al., 2007) which is around double that estimate.

Lucy Carpenter

---

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 27421, 2011.