Interactive comment on “Evaluating global emission inventories of biogenic bromocarbons” by R. Hossaini et al.

Anonymous Referee #1

Received and published: 28 May 2013

In this article, four different emission inventories for the VSLS bromoform (CHBr₃) and dibromomethane (CH₂Br₂) are evaluated on the basis of long-term data from ground measurement stations of NOAH and aircraft observations from the HIPPO and the SHIVA project. In the end the authors provide a new estimate of the stratospheric bromine loading based on the results of the investigations presented in this article.

The article is well written and easy to understand. This evaluation provides important information for the decision which emission inventory to use. The only draw back is that it is not clear from the paper, how the emission inventories are accessable. I strongly recommend publication of this article.

Scientific comments:
This article appears to be not fully complete, as it awakes the desire to get an optimal emission inventory for CHBr$_3$ and CH$_2$Br$_2$ compiled based on the findings of this article using the best performing emission inventory for each region and species. I understand, that this a lot of extra work. But at least it would be good to provide the information, where the single emission inventories are available for the interested reader/modeller.

Technical corrections:

- p. 12490, ll. 6-8: replace at least one of the three “contains”.
- p. 12491, l. 3: What is TransCom-CH$_4$. What does the questionmark mean, a missing reference?
- p. 12491, l. 11: top-down, should this not be in italics?
- p. 12491, l. 28: “magnitude/location” → “magnitude and location”
- p. 12493, l. 1: remove “and”
- p. 12503, l. 28: remove “data” behind CH$_2$Br$_2$
- p. 12504, l. 20: “upto” → “up to”
- p. 12504, l. 20: “Although also .. ” is inconvenient to read. Maybe “whilst also” ?
- Figs. 11/12: The symbols for the different observations are not distinguishable in a plot of this small size.

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 12485, 2013.