Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2017-126-EC1, 2017 © Author(s) 2017. This work is distributed under the Creative Commons Attribution 3.0 License.



Interactive comment on "Polar boundary layer bromine explosion and ozone depletion events in the chemistry-climate model EMAC v2.52: Implementation and evaluation of AirSnow algorithm" by Stefanie Falk and Björn-Martin Sinnhuber

S. Bekki (Editor)

slimane.bekki@latmos.ipsl.fr

Received and published: 19 October 2017

I would like to remind the aims and scope of GMD to the authors The reviewers are asking for a more detailed and thorough evaluation of the model results against observations. Unfortunately, the authors tend to "kick in touch", stating that it is beyond the scope of the paper and that a thorough evaluation will be carried out in the following studies. For instance, the authors reply: "Nevertheless, we would like to stress, that the

C1

main purpose of this paper is providing a proper description and reference regarding the implementation of the bromine explosion mechanism in EMAC". "Here, as stated above, we intent to focus on a proper description of the mechanism and its implementation into EMAC to serve as reference. A detailed validation of the mechanism in comparison to observation is beyond the scope of the present manuscript.". "The purpose of our current paper is not to examine the release mechanism originally proposed by Toyota et al. (2011), but to implement the mechanism in our model. The suggested comparisons may be subject to further, more detailed studies.". There might be a misunderstanding about GMD aims and scope. As stated on the 'about' page of the website, it is an "international scientific journal dedicated to the publication and public discussion of the description, development, AND evaluation of numerical models of the Earth system and its components". GMD articles are not just descriptions of numerical codes. The evaluation is an integral part of the papers. Just like the description, the evaluation should be as thorough as possible. I encourage the authors to follow the reviewers' recommendations regarding the evaluation. It would greatly strengthen the paper.

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2017-126, 2017.