

Geosci. Model Dev. Discuss., author comment AC1 https://doi.org/10.5194/gmd-2021-41-AC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on CEC1

Zhiyong Wu et al.

Author comment on "Extension of a gaseous dry deposition algorithm to oxidized volatile organic compounds and hydrogen cyanide for application in chemistry transport models" by Zhiyong Wu et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-41-AC1, 2021

Dear Dr. Añel

Following your instruction, I have posted a copy of the computer code for public access, which can be accessed by clicking one of the following two links:

DOI:10.13140/RG.2.2.16933.01760

(11) (PDF) Computer code - 45 gases Vd (researchgate.net)

Such access information will be included in the revised manuscript. For the convenience of the review process, a PDF copy of the code is also attached as an SI file in this response.

Regarding the model name, I would like to pint out that this model is a stand-alone version of a dry deposition scheme, which can be applied in any chemical transport models (CTMs) that deal with VOCs. It is extended from the dry deposition scheme of Zhang et al. (2003), which is also a stand-alone version that has been implemented widely in the scientific community both in CTMs and in monitoring networks for calculating dry deposition of many chemical species. Because the original model of Zhang et al. (2003) does not have an acronym, we prefer not to use an acronym for this extended version. Note that the this extended version presented in this manuscript is developed for general application and has not yet been implemented in any CTMs.

Thanks

Leiming Zhang

Please also note the supplement to this comment: https://gmd.copernicus.org/preprints/gmd-2021-41/gmd-2021-41-AC1-supplement.pdf