Comments by the Editor: https://doi.org/10.5194/gmd-2021-427-CEC1

Dear authors.

Juan A. Añel, Geosci. Model Dev. Exec. Editor

Unfortunately, after checking your manuscript, it has come to our attention that it does not comply with our "Code and Data Policy".

https://www.geoscientific-model-development.net/policies/code_and_data_policy.html

There are many problems with the code included in your manuscript.

3.1) First, in your manuscript, you state, "The MERCY v2.0 source code is available upon request"; however, the code is available openly on Zenodo.org. This is good news, but please, you should modify the statement in the text and remove the "upon request".

A: We corrected this

3.2) Also, you mention in the README file that the code is released under the Apache License. Notwithstanding, the repository is under the CC-4.0 license. You should modify the license of the repository and include a copy of the Apache License with your code.

A: We requested a change at zenodo.org and the uploaded readme file now includes the correct license as well as a copy of the license statement. MERCY v2.0 is now published under the CC-4.0 license. The "Code Availability" section has been updates accordingly.

3.3) About the COSMO-CLM and CMAQ codes: We need that they are archived in a suitable repository too, and the webpages that you mention are not enough. You could want to check if they are already stored in one. For example, there are versions of both of them on Zenodo.org, although I do not know if they are exactly the ones that you have used.

A: We were lucky and the models (more precisely the model versions) we used are available on zenodo:

CMAQ 4.7.1 https://doi.org/10.5281/zenodo.1079879

COSMO-CLM 4.0 https://doi.org/10.5281/zenodo.5939757

3.4) The same applies to HAMSOM-ECOMSO. However, here the problem is worse, as the link that you provided in the manuscript does not work. Therefore, you must provide a suitable link.

Therefore, please, publish the mentioned codes in one of the appropriate repositories, and reply to this comment with the relevant information (link and DOI) as soon as possible, as it should be available for the Discussions stage.

A: We uplaced the HAMSOM_ECOSMO_E2E v1.0 model source code to zenodo:

https://doi.org/10.5281/zenodo.7587005

3.5) In this way, you must include in a potentially reviewed version of your manuscript the modified 'Code and Data Availability' section and DOIs for the codes, which must be available and open without the need to request access to anyone.

A: We adjusted the , Code and Data Availability' section. It now includes links and DOIs for:

- CMAQ v4.7.1 https://doi.org/10.5281/zenodo.1079879

- ECOSMO-HAMSOM v1.0 https://doi.org/10.5281/zenodo.7587005

- COSMO-CLM v4.0 https://doi.org/10.5281/zenodo.5939757

- MERCY v2.0 https://zenodo.org/record/7101217