Dear Editor,

Thank you very much for your comments. The source codes that could be used to reproduce the results shown in the manuscript are registered on Zenodo. DOIs information is mentioned in the relevant section of the reply.

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

You have archived the LETKF code on GitHub. However, GitHub is not a suitable repository. GitHub itself instructs authors to use other long-term archival and publishing alternatives, such as Zenodo. Also, the GitHub repository for LETKF does not include a license. If you do not include a license, despite what you state, the code cannot be used by others, as it continues to be your property. Therefore, when uploading the model's code to the new repository, you could want to choose a free software/open-source (FLOSS) license. We recommend the GPLv3. You only need to include the file 'https://www.gnu.org/licenses/gpl-3.0.txt' as LICENSE.txt with your code. Also, you can choose other options that Zenodo provides: GPLv2, Apache License, MIT License, etc.

Reply: LETKF CH_4 data assimilation code registered on Zenodo could be accessed from the following DOI:

https://doi.org/10.5281/zenodo.7079167

About the MIROC model. We understand the reasons that preclude its publication. However, ideally, we should have evidence of proper internal storage by their developers. Therefore, please, provide additional detail on where and how the code is stored, and if possible, ask the developers to share a DOI for the version you use in this work.

Reply: MIROC4-ACTM code for CH_4 simulation setup for data assimilation registered on Zenodo could be accessed from the following DOI:

https://doi.org/10.5281/zenodo.7079139

Yours sincerely,