Response to the editor

Dear authors,

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

Beyond one Zenodo repository which contains the machine learning model and the meteorological input variables hosted in the RDA-NCAR, none of the other sites that you cite to get access to the code (e.g. WRF) or data, are valid repositories for scientific publication, and they do not comply with the requirements exposed in the policy of the journal.

Therefore, the current situation with your manuscript is irregular, as we can not accept manuscripts in Discussions that do not comply with our policy. Please, publish your code and data in one of the appropriate repositories according to our policy and reply as soon as possible to this comment with a modified 'Code and Data Availability' section for your manuscript, which must include the relevant information (link and permanent identifier (e.g., handle, DOI)) of the new repositories, and which you must include in a potentially reviewed manuscript.

I must note that if you do not fix this problem, we will have to reject your manuscript for publication in our journal.

Juan A. Añel

Geosci. Model Dev. Executive Editor

Re: Thank you for your efforts and time on handling the paper. The source codes of WRF-Chem, Python and the Scikit-Learn machine learning library have been revised in the Code and Data availability. See as follows: “

Code and Data availability

The data and code are publicly accessible at https://zenodo.org/records/15523200 (Ren et al., 2025). This includes the machine learning code, the corresponding training and testing dataset (chemical compositions, gaseous pollutants, meteorological datasets and simulated CCN concentration from WRF-Chem) and the observation CCN concentrations, the script and namelist file used in WRF-Chem and the scripts used for plotting, supporting the findings of this study. The release version of WRF-Chem source code is archived on GitHub (https://github.com/wrf-model/WRF, last access: May,

2025). The release version of Python and the Scikit-Learn machine learning library are open source from https://github.com/python and https://github.com/scikit-learn."