

Interactive comment on “Simulating Lightning NO_x Production in CMAQv5.2 Using mNLDN, hNLDN, and pNLDN Schemes: Performance Evaluation” by Daiwen Kang et al.

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Thank you for the efforts you have gone to to provide transparent access to the code and data for this manuscript. There are, however, a few points at which the code and data availability section is not currently compliant with GMD policy. These need to be remedied in the revised manuscript.

1. The CMAQ and WRF code references point to project websites. This is insufficiently persistent and precise for GMD purposes. Please also cite a persistent public archive of the exact version of the source used.

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2. Data processing and analysis scripts are available "on request". This does not meet GMD requirements. Please provide a citation of a persistent public archive of the scripts (e.g. Zenodo).
3. The lightning dataset is proprietary, which is acceptable. However please identify exactly the data set and version used so that a reader who wished to reproduce the work would know exactly what they needed to purchase and use.
4. The data citation to Zenodo is excellent. Please ensure that the additional data which is only "on request" is not actually required to reproduce the results.

Further details of the requirements for code availability can be found at https://www.geoscientific-model-development.net/about/code_and_data_policy.html. That page has been updated since this manuscript was submitted, however with respect to the issues in this manuscript, the new version is merely a more clearly stated version of what is required, rather than a substantive change in policy.

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