Dear Executive and Topical Editors,

Thank you for your feedback regarding our manuscript's compliance with the GMD Code and Data Policy.

We fully recognize the importance of transparency and reproducibility as upheld by GMD, and we acknowledge that the initial submission did not clearly articulate the institutional restrictions related to model code accessibility. We are grateful for the opportunity to correct this oversight and to bring our manuscript into alignment with the journal's policy.

The Korean Integrated Model (KIM) is developed and maintained by the Korea Meteorological Administration (KMA) and, due to institutional and national policy constraints, its source code is not publicly available. These restrictions are beyond our control as authors. This situation is comparable to other operational NWP systems, such as ECMWF's Integrated Forecasting System (IFS), for which GMD has acknowledged similar limitations in recent publications. For example:

"Model codes developed at ECMWF are the intellectual property of ECMWF and its member states and are therefore not publicly available."

(e.g., <a href="https://doi.org/10.5194/gmd-2024-188">https://doi.org/10.5194/gmd-17-7539-2024</a>)

In accordance with the GMD Code and Data Policy clause:

"Where the authors cannot, for reasons beyond their control, publicly archive part or all of the code and data associated with a paper, they must clearly state the restrictions."

We will explicitly reflect this limitation in the "Code and Data Availability" section of our manuscript, as follows:

"The Korean Integrated Model (KIM), developed and maintained by the Korea Meteorological Administration (KMA), is not publicly available due to institutional and national policy restrictions. Access may be granted to approved partners of KMA in accordance with internal policies."

Furthermore, in line with the policy that:

"Where only part of the code or data is subject to these restrictions, the remaining code and/or data must still be publicly archived."

We have already made available the key boundary condition datasets and conceptual model code through a public repository, and have provided download link for the relevant reference material. We will further expand the repository during the revision process to include additional model output datasets for each experimental case.

We respectfully request that the manuscript be allowed to proceed through peer review under this framework, given that key data and supporting code—excluding only the KIM source code restricted by institutional and national policy—have been made openly accessible in accordance with GMD's policy.

Sincerely,

**Euijong Kang**