GMD: Response to reviewers

September 14, 2026

We thank the reviewer for their feedback on our revised manuscript. Please see below for our responses to the specific reviewer comments.

1. "L. 61: ECMWF's model indeed still uses Beljaars 1995. I think `http://dx.doi.org/10.21957/49928f2338` is a more recent (and better suited) reference than Roberts (2018)."

   Response: Thank you for the reference. We have replaced Roberts (2018) with the 2026 ECMWF documentation.

2. "L. 95: "there are several important works related to the work presented in this paper" sounds repetitive. Perhaps: these concerns have only been examined in a limited number of previous studies?"

   Response: Thank you for noting the repetitive wording. The full sentence in the revised manuscript now reads: "Mathematical issues in turbulent flux parameterizations have only been examined in a limited number of previous studies."

3. "L. 538: "are still ill-posed". Drop the "in this scenario"; if the equations were well-posed, they would have a unique solution in every scenario."

   Response: We have removed "in this scenario" from this sentence.

4. "L. 545: in these cases *too*"

   Response: Thank you for pointing out this typo. The original "to" was actually superfluous and the sentence should have read "Thus, it appears that the stability limiter is a necessity in these cases in order for the turbulent flux parameterization to behave in a robust manner." We have corrected it in the revised manuscript.