

Dear Editor,

Please find here the final version of our manuscript, including all relevant changes made upon revision. In the final version, we removed some extra “~” characters, as referee#1 asked. Moreover, we now include the correct Fig. 4d, after correction of a small bug in the relevant plotting script. Some small differences in the values of Table A2, and the respective discussion in Sect. 3.2.1, are exist in this final version, without however changes at all our manuscript.

In more detail, in the submitted revised text in Sect. 3.2.1 it was:

“This issue is also reflected in the evaluation of the dust deposition field (Fig. 4d), with positive and negative biases over source regions but a clear underestimation of the deposited mass on transport and remote regions (e.g., the Southern Ocean). These discrepancies point towards an overestimation of dust deposition. For instance, EC-Earth3-Iron may share the difficulties of many global models in representing the long-range transport of dust, in particular coarse particles downwind of dust source regions (e.g., Adebisi and Kok, 2020).”

and now it reads as:

“The evaluation of the dust deposition field (Fig. 4d) shows both positive and negative biases over source and transport regions (see Table A1), with the deposited mass being generally underestimated, except for the Southern Ocean where the model tends to overestimate the observations. EC-Earth3-Iron may, thus, share the difficulties of many global models in representing the long-range transport of dust, in particular, coarse particles downwind of dust sources (e.g., Adebisi and Kok, 2020)”

Sincerely,

S. Myriokefalitakis