

Dear editors, dear Joris,

Thank you for the additional comments. The technical corrections following the referee's suggestions are detailed below.

With thanks and best wishes,

Pedro Batista (on behalf of the co-authors)

- *JE: Lines 63-64: Less than a quarter of the studies that assess the impact of climate change on soil erosion use a process-oriented soil erosion model (Eekhout & de Vente, 2022), so I would not say that these models are frequently used in this context.*

AR: Many thanks for pointing this out. We removed the term frequently (line 64).

- *Lines 265-266: The subscript use is a bit confusing. I assume the  $k$  refers to the timestep, but the  $s$  refers to the subsoil layer. But then where  $k$  is used, it refers to the plough layer, right? Hence, it is not more logical to use a  $p$  instead?*

AR: Thanks again, indeed using the subscript  $p$  makes more sense. This was corrected in lines 265-280.

- *Lines 273-274: Please introduce  $Tis$  in line 285.*

AR: The information was included in line 273-275, thanks for noticing.

- *Table 1: Maybe more logical to list the different texture classes in order of their grain size, instead of the current alphabetical order?*

AR: We changed the row order following the textural classes' grain size.