**Editorial comments:**  
We appreciate the Editor for his/her insightful comments. We have revised and improved the manuscript according to the valuable suggestions.

*1. Figures 2 and 3 look to be substantially the same as Figure 1 in your Catena paper; as that is under a CC license, permission is not necessary, but you must cite it in the Figure legends.*

**RESPONSE:** We added the citation in the legends of Figures 2 and 3.

*2. Step 3 will be very difficult to script and film, in particular without explicit software steps. Please provide more detail or do not highlight.*

**RESPONSE:** We added more details in Step 3. With all these steps, we hope that it is sufficient to repeat the model development procedure. Please let us know if more information is needed.

*3. 3.1.5: Should this be ‘Variance’ Inflation Factor?*

**RESPONSE:** We changed into “Variance”.

*4. Table 1: Please remove the references and ensure that the citations match up with the references list in the manuscript.*

**RESPONSE:** We removed the references from table and added to the reference list.

*5. Per your response to Reviewer 1, can you more explicitly say which data was used to calibrate the model and which data to validate? It’s not apparent in the current manuscript.*

**RESPONSE:** In this study, we collected soil samples from two spatial scales, including large-scale (watershed scale) and small-scale (site scale). The SOC density and soil redistribution rates from soil samples collected from the two field sites were used for model calibration. Soil data collected from the watershed area were used for model validation. We’ve added the information in the manuscript.

**Thank you for all these valuable comments**