Interactive comment on “Generating a global gridded tillage dataset” by Vera Porwollik et al.

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Thank you very much for providing helpful feedback. Please find below a point by point response to your comments.

Referee #6: This paper does not adhere to a single unit to describe area. The abstract and discussion use "Mkm²" while all figures and tables use "ha". Readers cannot compare the different units directly and need to convert "ha" to "Mkm²". Thus, I recommend that the authors use "km²" instead of "ha" in all the figures and tables. The main document should be also modified accordingly.

Authors’ response: We agree and will harmonize all area unit indication in the manuscript to km².

Referee #6: I tried to run R script on my PC; however it did not run because it required
some data to run in my environment. Thus, I recommend that sample R script should be provided with sample input dataset and output dataset. Then reader can run R script with the data provided and verify their output against a sample output dataset that can be involved. Otherwise, the reader cannot check whether their results were correctly reproduced or not.

Authors’ response: It is correct that in order to run the script the user needs to download the input data sets as indicated in our article, R-code but also described in the meta-data at the repository’s websites. We will include sample input and output datasets which can be applied for testing the functionality of the R-script.

Referee #6: In terms of figure 1, I suppose that each box in the figure should correspond to the R script. Thus, it is better to add information (ex. line number) that indicates which part of the R script corresponds to the boxes, and also to show the location in the Rscript, where different crop-specific tillage systems are evaluated. According to these, readers can easily understand the R script, which is also the authors’ objective.

Authors’ response: Thank you for this suggestion. We have now harmonized the wording of the tillage systems between the manuscript, the data-flow diagram (Figure 1) and the accompanying R-script. We improved the structure of the R-script to be more in line with the steps described in the manuscript. In the R-script we also added comments, indicating which section generates which table and values of the manuscript.