

Authors response to reviewer comments

Dear Dr. Tian,
Dear referees,

Thank you for helping us to improve our manuscript with your comments. Below you will find our responses to the last three comments. We hope that all open questions are now answered and that the paper is ready for publication.

Best Regards,
Tobias Hohenbrink, Conrad Jackisch, Wolfgang Durner, Kai Germer, Sascha Iden, Janis Kreiselmeier, Frederic Leuther, Johanna Metzger, Mahyar Naseri, and Andre Peters

Review report #1:

The authors addressed all the topics raised during the review. Only the following minor issues could be solved before publication:

1. present Table 2 is very informative, maybe reference to HYPROP, falling and constant head method, BD measurement method, wet sieving, hydrometer method, high-temp. combustion could be added,

Answer: We have added references for the methods or references to the measuring devices used.

2. L259: Figure 1: ... USDA (d-f) system ... ,

Answer: It has been corrected.

3. L294-295: the data set was not available from the link given in the manuscript, therefore it was not possible to check changes added to the dataset, e.g.: adding information on soil depth, modifying some column names, revising negative values; this is the reason for indicating data quality "Good" and not "Excellent".

Answer: We have implemented all the proposed changes to the data and their technical description on the repository. The revised data set can currently be accessed via the following review link:

<https://dataservices.gfz-potsdam.de/panmetaworks/review/5c617cd2664ea4d03e81301b5bc2236f1948a3cf7eb9bad48da940524f0cbac0/>

We assume that the link was corrupted during PDF conversion of the manuscript and would like to apologize for this.