Hydrol. Earth Syst. Sci. Discuss.,
doi:10.5194/hess-2016-333-AC2, 2016

Hydrology and Earth System Sciences
Discussions
Open Access
EGU

Interactive comment on "Variation of soil hydraulic properties with alpine grassland degradation in the Eastern Tibetan Plateau" *by* T. Pan et al.

T. Pan et al.

pantao@igsnrr.ac.cn

Received and published: 20 October 2016

Dear editorïijŽ We have received the comments from the second anonymous reviewer on our manuscript entitled "Variation of soil hydraulic properties with alpine grassland degradation in the Eastern Tibetan Plateau" (2016-333). These suggestions and comments are quite explicit, aimed at specific problems and errors. Therefore, according to the following comments, we directly adjust and revise related contents in the manuscript. Thank you very much for your work.

Comment 1 The study analyze the effects of alpine grassland degradation on soil hydraulic properties in Tibetan Plateau. Nine sites representing various degradation degrees were selected, and field and laboratory experiment were applied. The study give the confident results by the abundant data and detailed explanation, and it will

Printer-friendly version

Discussion paper

contributing to understand the soil hydrological effects of vegetation degradation. However, there are several minor problems need to improve before the manuscript can be accept. Response: We are really grateful for the reviewer's recognition of our work, and these positive comments on the manuscript are quite encouraging. We tried our best to correct the following problems pointed out by the reviewer and thereafter check the manuscript carefully lest any errors and mistakes.

Comment 2 The conclusion focus on the effects of CP and NCP on FC and Ks, and it should be improved to express more content of research Response: We agreed on the comment very much. As the reviewer suggested, we adjusted the content of conclusion and improved to express more content about the grassland degradation impacts on soil basic properties and soil moisture.

Comment 3 At the 2.1 part, the VC, DS, and NS were selected as indicators of degradation, the VC is explained before, while the DS and NS need explains here. Response: We are sorry for our negligence, the two confusing abbreviations have been replaced by the full name in section 2.1

Comment 4 "Mean values of NCP decreased from LD to MD by 6.6% while increased from MD to LD by 4.4%, following the order of LD>SD>MD.", the presentation is error. Response: Thanks for pointing out the error, it should be "MD to SD", and we have corrected the presentation in the revised manuscript.

Comment 5 The explanation of letters above the bars in Figure 5 and Figure 6 need improve, and the name of figure 5 need to change. Response: According to the reviewer's advice, we have further explained the meaning of letters above the bars in Fig 5 and 6 in the figure caption. The name of Fig 5 was also adjusted.

Comment 6 The axis shows of figure 7 is not clear. Response: We adjusted the position of the axis name, making the axis indicating more clear. We also explained more details about the axis in the revised figure caption.

Comment 7 Monte-Carlo permutation test used in the manuscript to get the Table 3 needed to explain Response: We have introduced the method to get the Table 3 in detail, and the relationship between the contribution of total variance and Monte-Carlo permutation test was also clarified in section 2.3..

Please also note the supplement to this comment:
http://www.hydrol-earth-syst-sci-discuss.net/hess-2016-333/hess-2016-333-AC2-supplement.pdf

---

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2016-333, 2016.

Printer-friendly version

Discussion paper