

## *Interactive comment on* "Impacts of management practices on soil organic carbon in degraded alpine meadows on the Tibetan Plateau" *by* X. F. Chang et al.

## Anonymous Referee #2

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## General comments

Sorry for my late review. I have now arranged to finish my review on this MS by Chang et al., which simulated soil carbon dynamics under different management scenarios in alpine grasslands on the Tibetan Plateau. As mentioned by these authors, a large proportion of grassland area on the plateau had experienced more or less degradation due to intensive grazing activity. Due to this point, it is of great significance to explore how soil carbon pool responds to grassland degradation and restoration. The manuscript is well written, and I only have some minor comments which should be considered during the revision.

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(1) The authors used Haibei's biomass data to calibrate Century model, and then predicted SOC dynamics in Zeku County. What kind of uncertainties will be produced due to the long distance between Haibei and Zeku? (2) I think the authors should at least cite some related references or acknowledge the related scientists when using data from Haibei Research Station since these long-term measurements are not performed by these authors. (3) Actually, the RMSE in Fig.2 was pretty large, even larger than the average SOC density among different sampling sites, indicating large uncertainties involved in model simulation. The authors should clearly acknowledge this point in the revised MS. (4) There are some clerical errors throughout the manuscript, please carefully check them before final acceptance.

Interactive comment on Biogeosciences Discuss., 11, 417, 2014.