Interactive comment on “Vegetation in karst terrain of southwestern China allocates more biomass to roots” by J. Ni et al.

Anonymous Referee #3

Received and published: 21 April 2015

This manuscript studies the root biomass distribution in a karst terrain of SW China. As reported by the others reviewers, a great deal of fieldwork has been developed. Moreover, the sampling strategy is adequate and the results are representative. I recommend publication after minor revision, detailed in the following comments.

Although the paper is in general well written, there are some minor mistakes in the English language (prepositions, commas allocation…). Please check throughout the manuscript.

Abstract

P1210 L7: I understand that not all the stages are degraded, since forest is the climax stage.
Introduction

P1211 L9-19: I think that the names of the regions presenting karst geomorphology are not necessary. Please summarise this section of the introduction.

P1213 L9: Two decimal positions are enough.

Material and methods

P1214 L10: What is the meaning of “rich rainfall” here?

P1214 L19: Change “nutrition” to “nutrients”.

P1215 L10-13: This sentence is too long.

P1216 L8: Change “representative” to “representativeness”.

P1216 L10-12: This sentence is confusing. It seems that 10 soil pits have been excavated in 50x50 cm. Please rephrase.

P1216 L26. I miss some information about the statistical analysis. Was it done pairwise? Were all the factors included in a single ANOVA? A one-way ANOVA was done for each factor? What was the post-hoc analysis?

Results

In general, I think that too much information is provided, and sometimes it is difficult to follow the differences between habitats, vegetation stages, soil layers and types of roots, including the exceptions to the general trends. I think that the text should focus in the main results, and refer to the figures for detailed results and exceptions. I agree with the others reviewers about including more information in the figures, e.g. letters to denote significant differences and error bars, so you can summarised the results section.

P1217 L6. Please define “top layers”. Do you mean the first 10 cm, 20 cm? If you mean the first 10 cm, there is a contradiction between this results and the one reported
in P1217 L4 (65%).

Discussion

P1222 L13-14: Please rephrase this sentence.

P1222 L16: What do you mean with “better natural environment”?

Conclusions

P1223 L9-12: The first four lines of the conclusions are a summary of the introduction, please remove them.

Figures

Please be consistent in the legends. Root categories should be represented by the same colours in the figures 2 and 3.

Interactive comment on Solid Earth Discuss., 7, 1209, 2015.