**Interactive comment on** “The critical factors that affected the distribution of aboveground biomass in the alpine steppe and meadow, Tibetan Plateau” by J. Sun et al.

J. Sun et al.

jiansunofcas@gmail.com

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Dear Referee,

Thank you for your helpful comments and suggestions on our manuscript. We have modified the manuscript accordingly, and detailed corrections are listed below point by point:

1) Fig.2 (B) & (C): X-axis is OK? Please revise the numbers to X-axis VS Y-axis. We have revised the X-axis VS Y-axis of the Fig.2 carefully according to your suggestion.

2) Fig. 3: Confusing. Please show the Table in these data.
The Fig. 3 has been converted to Table 2, it was shown in end of manuscript.

3) Fig. 4: I think latitude and clay are not environmental factors.

The viewpoint of referee was accurate, when the indicator - latitude was used in the small-scale or field plot. In our manuscript, we considered that the latitude could be taken as an environmental factor for the latitude was related to the water-heat gradient in the large-scale or regional scale. Meantime, the clay affects the soil water content, and then affects the distribution of aboveground biomass, thus we classified the indicator-clay into environmental factors in this paper.

Thank you,

Yours,

Jian Sun & Gengwei Cheng

2012/12/10

Interactive comment on Biogeosciences Discuss., 9, 14559, 2012.
Fig. 1.
### Table 2: The correlations between AGB with environmental factors

<table>
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<th>AGB</th>
<th>Longitude</th>
<th>Latitude</th>
<th>Altitude</th>
<th>MAT</th>
<th>MAP</th>
<th>Moisture</th>
<th>Clay</th>
<th>Silt</th>
<th>Nitrogen</th>
<th>SOC1</th>
<th>SOC2</th>
<th>SOC3</th>
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<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>.620**</td>
<td>.645**</td>
<td>-.616**</td>
<td>-.177</td>
<td>.397</td>
<td>.081</td>
<td>.507</td>
<td>.506</td>
<td>.620**</td>
<td>.570**</td>
<td>.720**</td>
<td>.465**</td>
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<td>Sig. (2-tailed)</td>
<td>0</td>
<td>0</td>
<td>0.131</td>
<td>0.382</td>
<td>0</td>
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<td>Alpine steppe</td>
<td>Pearson Correlation</td>
<td>.503**</td>
<td>.389*</td>
<td>-.418*</td>
<td>0.071</td>
<td>0.092</td>
<td>0.303</td>
<td>0.132</td>
<td>0.342</td>
<td>0.502**</td>
<td>.433**</td>
<td>.432**</td>
<td>.417*</td>
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<td>Sig. (2-tailed)</td>
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<td>0.094</td>
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</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).