

*Interactive comment on “Simulating the spatiotemporal variations in aboveground biomass in Inner Mongolian grasslands under environmental changes” – by G. Wang et al.*

Dear editor,

Thanks for your efforts in processing our MS. We have addressed the comments from the second reviewer as follows (the first reviewer didn't provide specific comments in this round). In addition, we have also thoroughly edited our language of the whole paper in this round.

We thank you again for your consideration of our paper and look forward to hearing from you soon.

Guocheng Wang et al.

**Referee #2**

I am happy that the authors considered the CO<sub>2</sub> fertilization effect on the AGB. After considering this CO<sub>2</sub> effect, there is a reverse in future changes of AGB. In the abstract (Line 24), the authors should emphasize AGB changes only from the perspective of climate change. For space-time substitution, I understood that it would be difficult to be resolved. But I would suggest adding more discussion and acknowledging the limitations.

**Authors' Response:** Thank you very much for your understanding of our study. We have emphasized that the simulated AGB changes in the future is only based on the perspective of climate change in the Abstract (Line 24). The possible uncertainties induced by space-time substitution has also been discussed in the revision (Line 303-307).