

Dear Editor,

we are happy that you and the two reviewers were satisfied with our thorough revision of the manuscript. Please find attached the answers to the two open comments by reviewer 2. In addition, we applied two formal corrections for which the editorial support team asked us, i.e. adding full first author names and re-formatting Table 2 to avoid colors and reducing it in size.

Yours sincerely,  
Anita Bayer et al.

### **Reply to reviewer 2:**

The authors have done a great job addressing reviewers' comments. I only have two remaining minor comments:

L30-32: please add the range for these trends (as presented later in the result section). This is still missing despite my comment and is very important given that highlighting divergences/uncertainties is precisely the main point of the study.

We are sorry for this mistake and of course you are right that the uncertainty ranges are one focus point of the study. In our revision we had only added the averages to the variability ranges in the second sentence. We changed this to have both, average change and variability across scenarios, in the first sentence and no numbers in the following sentence.

L30-35: Across the diverging LULC projections we identified positive global trends of net primary productivity ( $+10.2\% \pm 1.4\%$ ), vegetation carbon ( $+9.2\% \pm 4.1\%$ ), crop production ( $+31.2\% \pm 12.2\%$ ) and water runoff ( $+9.3\% \pm 1.7\%$ ), and a negative trend of soil and litter carbon stocks ( $-0.5\% \pm 0.4\%$ ). The variability in ecosystem service indicators across scenarios was especially high for vegetation carbon stocks and crop production.

This sentence does not make sense to me grammatically: "While it is not completely impossible, of course, we argue that a speed and magnitude extremely opposing trends observed in the past seem at least questionable

We changed the sentence to (l475-477) "While it is not completely impossible, of course, we argue that a speed and magnitude which extremely oppose trends observed in the past seem at least questionable."