Interactive comment on “Assessing and analysing the impact of land take pressures on agricultural land” by Ece Aksoy et al.
Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-154, 2016.

Anonymous Referee #2
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General comments
The authors present an analysis of land take in arable land in Europe between 2000 and 2006. The novelty of the study is that it is done according to potential biomass productivity levels. The methodology and results are sound but their reporting could be improved.

Author’s response 1: Thank you very much for your comments and valuable suggestions.

Also, an overall conclusion should be added.

Author’s response 2: Right, conclusion will be added to the manuscript.

The authors sometimes refer to agricultural soils, sometimes to arable land, apparently equalling both. This should be clarified.

Author’s response 3: You’re right, thanks for this important suggestion. Most of the agricultural land including title is changed. But some of them were kept because of the correct meaning of the agriculture and also the references.

In the captions of figures 3 and 6, “arable” should be used instead of “agricultural”.

Author’s response 4: Thank you for this very careful and important comment. Corrected.

Specific comments

L137: Not clear whether the classification into ‘poor’, ‘average’ and ‘good’ is based on mean and standard deviation or on 33 and 66 percentiles. If it is the latter, please remove reference to mean and standard deviation.

Author’s response 5: Right, corrected (mean and standard deviation are deleted).

Figure 4: the colour ramp should be the same for the three sub-figures rather than quantile based. The figures should also be of better resolution/bigger.

Figure 5: same comments as figure 4.

Author’s response 6: This issue had been discussed with the other colleagues as well. The problem is that trying to map very small numbers, that’s why we gave the impacts in NUTS3, otherwise, they were not visible. If we didn’t change the color ramp for the each of the sub-figures, some of the sub-figures would have only one color. Therefore, this is the only way to visualize those different ranges of values.

The original of the image is much bigger and more visible because of the better resolution but since they’re embedded to the manuscript with the lower resolution for review purpose, they look small and bad quality. I’ll upload each of the figures separately in good quality, so I hope it’ll be much better in the published version.