

Interactive comment on “Net global warming potential and greenhouse gas intensity in a double cropping cereal rotation as affected by nitrogen and straw management” by T. Huang et al.

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General: The paper is of good scientific quality, is well written and the results are presented clearly. The methodological approach is sound and allows for the calculation of net global warming potentials of farming management options by combining data from field research with data from other sources. Choosing this approach this study provides important data on the climate impact as influenced by nitrogen and straw management.

Specific comments: The authors state on page 13198 “Because the changes in SOC content at depths of 20–40 and 40–60cm were small over the last 6 yr and not signifi-

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cantly different between treatments (data not shown), we calculated the SOC content in the different treatments only in the top 20cm of the soil profile.” Why not reporting the subsoil SOC data, because this is exactly, that is lacking in field trials on SOC dynamics. In this regard I would suggest changing Table 4 on p. 13223 to a more meaningful and less redundant table by inserting data for the depth increments 0-20, 20-40, 40-60 cm as a new column and only reporting SOC data of these depth increments for the year 2006 (start of observation) and 2012 (end of observation). The SOC changes over the various years are illustrated in Fig.2, already.

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