

## ***Interactive comment on “Soil greenhouse gas fluxes from different tree species on Taihang Mountain, North China” by X. P. Liu et al.***

**Anonymous Referee #1**

Received and published: 28 August 2013

The authors investigated soil GHG fluxes (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) and their potential drivers among the six different tree species on Taihang Mountain of north China. After going through the whole paper, the MS reads like a scientific report. I did not give any detailed suggestions/modifications on the MS itself but presented several large concerns. Firstly, the discussion part can be regarded as a review of previous work and is full of simple listing. I am afraid that the readers can not really get any new insights from this part. There should be many interesting things that could be discussed. For example, the authors selected a good study place where plantation and nature regenerated forests coexisted but the further discussions on the potential similarity/difference of GHGs between these two type of forests and the implications (this may become a eye-catching point for this MS) were absent. Secondly, I understood that the annual fluxes for CH<sub>4</sub> and N<sub>2</sub>O can be calculated based on simple time interpolation because

C4619

these fluxes showed poor correlations with the measured soil properties (e.g. soil temperature and soil moisture). But this method would greatly introduce the significant bias into annual CO<sub>2</sub> flux calculation because CO<sub>2</sub> fluxes were strongly correlated with the soil temperature (and also soil moisture) and their relationships should not be linear. Finally, there are numerous grammar and spelling errors. I strongly suggest that the MS should be carefully checked and revised by the native English speakers if it was resubmitted or submitted to other journals. Based on the above-mentioned issues, I suggest that the paper presented like this should not be published in Biogeosciences.

---

Interactive comment on Biogeosciences Discuss., 10, 11037, 2013.