

***Interactive comment on “Effects of nitrification inhibitors (DCD and DMPP) on nitrous oxide emission, crop yield and nitrogen uptake in a wheat-maize cropping system” by C. Liu et al.***

**Z. Xiong (Referee)**

zqxiong@njau.edu.cn

Received and published: 10 February 2013

“Effects of nitrification inhibitors (DCD and DMPP) on nitrous oxide emission, crop yield and nitrogen uptake in a wheat-maize cropping system” by Liu et al. determined the integrative effects of nitrification inhibitors on decreasing N<sub>2</sub>O emission while promoting yield and nitrogen use efficiency in fertilized wheat-maize agricultural fields with year round measurement. This study provided important data and comprehensive results on application of nitrification inhibitors of DCD and DMPP in upland agricultural field. The research itself is of high quality in spatial and temporal resolution and data collection and analysis. I myself just enjoy reading through this paper with high quality.

C66

Their efforts are highly appreciated. Concern: The influences of the automated chamber system on plant growth and yield formation need to be clarified and then the yield or plant biomass measurement methods need to be stated shortly since nitrification inhibitors increased yield and N use efficiency as claimed. However, the differences among treatments in nitrogen use efficiency, yield and N contents were not different statistically while decreased N<sub>2</sub>O emission and nitrate content. So please indicate their statistic results in the abstract and conclusions in a proper way. Table 1. Delete word “capital” letter for the notes.

---

Interactive comment on Biogeosciences Discuss., 10, 711, 2013.

C67