Interactive comment on “Impact of extreme precipitation and water table change on N₂O fluxes in a bio-energy poplar plantation” by D. Zona et al.

Anonymous Referee #3

Received and published: 26 April 2011

This manuscript holds relevant information on N₂O emissions from poplar plantation after high rainfall events. The N₂O measurements were carried out with EC system. The data analysis is appreciable but the novelty issue is still there. I am not fully convinced with the novelty of the manuscript. The high N₂O emissions after heavy rainfall are not new and there is no temporal or spatial resolution. The author seems not very well aware of the present studies (e.g. Rafique et al 2011; Kim et al 2010).

I have doubt if this work is publishable with this present output. Author wrote the manuscript very well but most of them look over speculation and spent too much time other things rather than any main issue. I am very much agreeing with the comments of the reviewers 1 and 2. I would encourage resubmitting the manuscript after taking in to account the following issue: 1- Improve the novelty issue with the explanation of N
concentration changes and investigation of CO2 and water fluxes etc. 2- Interpret the results and discussion with new studies (e.g. Rafique et al., 2011; Kim et al 2010) 3- Include temporal and spatial resolutions (agreed with reviewer 2)

Interactive comment on Biogeosciences Discuss., 8, 2057, 2011.