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Interactive comment on "Response of respiration and nutrient availability to drying and rewetting in soil from a semi-arid woodland depends on vegetation patch and a recent wild fire" by Q. Sun et al.

Anonymous Referee #2

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The authors only used two treatments to simulate the effects of heavy rainfall event (drying-rewetting) on soil respiration and nutrient availability of forest ecosystems during 20-day incubation. I am wondering why the authors set the control treatment at 80% water holding capacity. I have found that this experimental site is subjected to semi-arid climate with 251 mm of mean annual rainfall (Line 12 page 8726). I think that they should set a control treatment at 40% or lower of water holding capacity. Thus there are a total of three treatments rather than two treatments in this paper, which will make this experimental design more reasonable. Although they give a reason (Lines

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15-18 page 8727) to explain why they used 80% of water holding capacity, I think the reason is weak and not convincing. This is forest soils, not wetland soils. So I have to reject this current version of paper. I suggest to supply these data which will make this work more interesting.

Interactive comment on Biogeosciences Discuss., 12, 8723, 2015.