

Interactive comment on “Impact of elevated precipitation, nitrogen deposition and warming on soil respiration in a temperate desert” by Ping Yue et al.

Anonymous Referee #1

Received and published: 5 December 2017

The effects of elevated precipitation, N deposition and warming on soil respiration was analyzed in a temperature desert based on 2-years data. Its valuable to promote the research on the response of soil respiration to climate change in dry land. But this manuscript needs major revision before publication.

detailed comments: 1. Fig 3 showed the diurnal variation of Rs during one sun day and one post-rain day, so the diurnal pattern of Rs in Fig 3 may can not represent the diurnal pattern of Rs across the whole year. If not, the measured Rs during 10:00-12:00 may show large difference with the daily average of Rs and further failed to show the effect of treatment on Rs for everyday in 2014-2016. It may be better to show the

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diurnal pattern of Rs at different seasons. 2. all gas samples were taken at 10:00-12:00 in everyday, however, the warming effect on soil temperature is not obvious during this sampling time (the obvious warming effect on soil temperature occurred at midday and afternoon time, fig 3a). So the samples during 10:00-12:00 in this study may failed to catch the real warming effects on Rs.

Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2017-465, 2017>.

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