

Interactive comment on “Autotrophic component of soil respiration is repressed by drought more than the heterotrophic one in a dry grassland” by J. Balogh et al.

Anonymous Referee #1

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Although some of the open questions have been clarified, and some concerns have been partly (but only partly) dispelled, the first and most serious criticism remains, and that is the use of only one chamber each for isotopic measurements of the component fluxes of soil respiration, which form the core of your paper and the basis for your main findings and conclusions. You wrote "We used 5 small chambers in this study for the isotopic measurements", but this is – according to your Materials and Methods section (p. 16891, l. 15-18) – the sum of 3 chambers for total respiration, 1 chamber for heterotrophic respiration, and 1 chamber for heterotrophic plus mycorrhizal respiration. It is not possible to derive any statistically meaningful result from those measurements, i.e. any statement on the effect of drought on the different component fluxes of soil

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respiration is void.

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