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## Interactive comment on "Carbon input control over soil organic matter dynamics in a temperate grassland exposed to elevated CO<sub>2</sub> and warming" by Y. Carrillo et al.

M. Bahn (Editor)

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Received and published: 1 June 2010

I fully agree that priming effects need not be evoked only by plants. In fact, most experiments on priming effects have been carried out by adding different substrates to soils in the absence of plants. However, in your study you do address priming effects which are directly related to plant and in particular rhizosphere activity (as also suggested by your text and Fig. 6). Thus, to my perception the effect you observe is a 'rhizosphere priming effect', though SOM is decoupled from the rhizosphere during the incubation. This partial decoupling results in a confounded situation, where the overall effect size may potentially be altered by incubation time (and temperature?), as

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previously discussed. In case you decide to submit a revised manuscript you might like to address this issue with the greatest possible conceptual clarity.

Interactive comment on Biogeosciences Discuss., 7, 1575, 2010.