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Interactive comment on "Evidence of old soil carbon in grass biosilica particles" *by* P. E. Reyerson et al.

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Regarding Dr. Hodson comments, we do not understand the remark "What is much less clear to me is why we should expect the carbon coming up from the soil to be concentrated in the phytoliths once it got there." Because our phytC 14C dates matched neither the 14C signatures of the plant tissue nor soil-C fractions. It is clear that just a portion of the old soil-C is allocated within phytC (as we stated). Nevertheless, this does not preclude that some portions of phytC contains younger soil-C. The point is that any soil-C within phytC that differ in age by less than a few decades cannot be coherently reconciled by 14C measurements alone. Nowhere do we state that soil-C is solely concentrated within phytoliths. In addition, although the recent review of Hudson (2015) is interesting and echoes some of the discussions already reported in Santos et

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al. (2012), it does not address the specific findings reported in this work (see reply to reviewer #2 in the open discussion). For the specific amino-acids adsorption remarks, we suggest that readers check Santos et al. (2012) and Alexandre et al. (manuscript submitted to BG) articles.

References

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