

Interactive comment on “Fluvial sedimentary deposits as carbon sinks: organic carbon pools and stabilization mechanisms across a Mediterranean catchment” by María Martínez-Mena et al.

Anonymous Referee #1

Received and published: 24 October 2018

bg-2018-414 presents an interesting study concerning the OC stabilization mechanisms at catchment scale by comparing the soil OC concentrations in different aggregate soil fractions in eroding, depositional and transport areas in the sub humid Mediterranean region. This paper contributes to the identification of sources and sinks of organic carbon affected by soil redistribution processes. An intense soil sample collection and a very consistent laboratory work were conducted. The main findings of the study are well supported by the data. So the results are definitely worth being published. Comments to Authors: since there are little or no binding organic compounds

C1

with sand particles, a correction for the sand content (Elliot et al. 1991) to compare soil aggregation and OC contents should be considered. Technical corrections revise km² and sub-humid or subhumid

Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2018-414>, 2018.

C2