



Interactive comment on “Organic carbon stocks in Mediterranean soil types under different land uses (Southern Spain)” by M. Muñoz-Rojas et al.

Anonymous Referee #1

Received and published: 13 September 2012

The study presented by Munoz-Rojas et al. represents an important advance to the current state of knowledge about organic carbon stocks in soil at large scale. In fact the work considered a large area, focused in a general picture rather than a detailed analysis. The number sampling points is more than enough to represent the studied area. The value of the work is high especially because the analyses were carried out at different soil depths, different soil types and land uses. This approach, made it complex, but more interesting. In addition the authors considered the limitations of their study, regarding the spatial variability of soil organic carbon that in fact is a great limitation, due the variability of the environmental variables, and the complex influence of human activities in soil properties. In my opinion the paper it is of SOLID EARTH reader's interest, and it accepted. However before publish some aspects should be addressed that I will mention bellow. A better statistical analysis can make more strong

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the authors arguments Introduction

Line 13: These reports have to be mentioned. It is to general say that some reports were published by UNFCC. Methodology: line 27, page 1102. The present formula was used in previous studies? Where? Line 9, page 1103. What method the authors used to interpolate data? A better explanation should be provided, because different methods produce different maps... Also some statistical comparisons (e.g ANOVA analysis) between land use and sol types, might show if the differences are really important or no. In addition the authors should mentions Results Line 26, page 1105. With the variability observed in all this data, I would like to know if the data follows the normal distribution. Including with the most robust methods (e.g kriging) strong deviations to the normality can induce important changes in data interpolation...

Interactive comment on Solid Earth Discuss., 4, 1095, 2012.