

***Interactive comment on “Moderate topsoil erosion rates constrain the magnitude of the erosion-induced carbon sink and agricultural productivity losses on the Chinese Loess Plateau” by J. Zhao et al.***

**Anonymous Referee #1**

Received and published: 22 September 2015

The ms describes a new and valuable approach to estimating topsoil erosion and the associated carbon sink for the Loess Plateau area. My substantive comment is that the error figures for the erosion estimates are not justified. There are presumably errors associated with the regression equations, with the interpretation of spatial sampling, with scaling the slope estimates and perhaps others. it would be helpful to run the reader through how the estimates were obtained.

an error on p8, l 2 - presumable 'square root of slope length...'

---

C5626

Interactive comment on Biogeosciences Discuss., 12, 14981, 2015.

C5627