1. Meng was not able to find the soil C and C accumulation rate data from this PDF.

***[Response from Blanca]*** *this data is from Scott Neubauer (see excel attached, “Sedimentation raw data\_Neubauer.xls”). Look at the Khan and Bush 1994 tab in this excel - looks like Scott had the data of each depth increment. 159 is the average of M3 and M8 divided by 2.*

According to the response from Blanca, we found that this paper does not report carbon density directly. We calculated carbon density from OM content and bulk density, but not carbon concentration. To calculate carbon density, their data were entered into a spreadsheet, then processed with SAS code to calculate carbon density. The calculation steps were as follows:

a. Convert organic matter (OM) to organic carbon units.

We used the following equation developed by James Holmquist (in review):

SoilCC=0.074\*(OM/100)\*(OM/100) + 0.421\*(OM/100) - 0.0080, where

SoilCC = C concentration in units of grams C per grams soil

OM = organic matter concentration in units of grams OM per grams soil

b. Convert soil carbon concentration (SoilCC) to carbon density.

SC=SoilCC\*BD, where

SC=Soil carbon density in units of grams carbon per cubic centimeter (g/cm3)

Soil C rate data was calculated as:

SC rate = SC \* accumulation rate\*10000;