Interactive comment on "\(^{14}\)C in cropland soil of a long-term field trial – in-field variability and implications for estimating carbon turnover" by J. Leifeld and J. Mayer

J. Leifeld and J. Mayer

jens.leifeld@agroscope.admin.ch

Received and published: 7 May 2015

There is indeed a transcription error in some of the numbers for the coefficients of variation in Table 2. We apologize, thank the reviewer for his/her careful reading and will correct those data upon revision. This will change the numbers in Figs. 2 and 3 slightly, but will not the main findings of our study. A second point raised in the review highlights the terminology used. We refer to in-field variability, which may be, according to the reviewer, better specified as experimental variability. The argument is that an in-field variability reflects soil heterogeneity, which, if we understand the reviewer correctly, would be indicative of variability that is independent of the experiment. However, the
variability in SOC and 14C is largely determined by the variability in plant growth and residue input among the five reps per treatment throughout the experiment, i.e., it may occur independently of any pre-experimental variability in soil properties across the field. This is also why, prior to submission, we decided not to use the term 'spatial variability', which may have misled readers. We will adopt the reviewer’s suggestion regarding terminology. During revision of the methods section, we will explicitly refer to the term in use to clarify this issue.

Interactive comment on SOIL Discuss., 2, 217, 2015.