

## ***2. Referee Comment of Joseph Yavitt, 11-02-12***

The authors would like to thank the referee for the very helpful comments and suggestions. We will consider these points in the revised manuscript. Nonetheless, we would like to comment on some individual points below.

*Comment on results: “2) I suppose the range of values presented in Table 2 is okay. However, this merely shows variation in soil properties. Consider presenting the median value for each site in order to compare among sites.”*

We agree that in Table 2 it is difficult for the reader to compare physical properties among sites. However, we were hesitant in presenting a site median here, as the data base is relatively scarce for some sites; therefore a median by itself might have low informative value. In any case we would need to present the range of values to provide information about the rather large variance encountered.

In the revised manuscript, we will now provide both the median and the range of values in parentheses for each site. A comment will be added to refer to the number of samples for each site given in Table 1.

*Comment on results: “5) Page 1271, line 23: consider stating explicitly that organic carbon was below detection.”*

We would like to highlight that organic carbon (TOC) was not measured directly; therefore the term “below detection” might be inappropriate. TOC was calculated as the difference from the measured contents of TC and IC, but the standard deviation of sample replicates in either TC or IC measurements was always in the range of this difference.

However, in the revised manuscript we will add such a statement in the results section.

*Comment on discussion: “1) Page 1275, line 24: are the data in Table different than data in the referenced papers? They appear to be different; however, I did not read each paper carefully.”*

The data on the chemical properties presented in Table 3 generally show high variance within the sites, due to the natural heterogeneity of the environment and the relatively small number of samples in some sites. However, we believe that the measured values are certainly in the same order of magnitude than in the referenced papers. We would also like to note that from the paper of Bernasconi et al. (2011) only values from young soil within 200m distance to the glacier terminus should be compared with our samples.