

I am glad to see that the authors spent lots of effort to improve this manuscript and it is much clearer now. I do not have major comments regarding to the structures and contents, but have two comments as below.

P8L20-21: I prefer to delete the latter sentence 'and there was a modest increase in the permafrost-associated domain CV from Summer (46%) to Fall (56%)' as this result has nothing to do with the following inference.

P10L25-30: The authors mentioned two possible mechanisms here for explaining the observed patterns; it may be more helpful if they can provide some relevant references to support their ideas. There are plenty of publications concerning the relationship between temperature/soil moisture and microbial/root respiration.