

Review Speetjens et al Biogeoscience

Resubmission - Dissolved organic matter characterization in soils and streams in a small coastal low-arctic catchment

General Comments:

In this manuscript by Speetjens et al they have addressed all comments from the previous round of revision and clarity has improved. The paper continues to be a real asset in C Biogeochemistry especially in Arctic and small coastal watersheds. However, there are some minor improvements that could be made in the introduction to polish a bit more the central idea of the paper.

The introduction has improved and now the importance or relevance of these small watersheds is clearer. But the central aim of the paper is to better understand terrestrial aquatic linkages and ocean OM budgets yet the context of these topics are not very clear in the Introduction leading up to the last paragraph where the authors lay out the objective of the paper. This suggestion is not intended to be a major overhaul, just add a few more sentences that help to contextualize lateral fluxes and OM budgets, which are already large black box in terms of OM processes regardless of geographic location. In the Arctic these fluxes have a much greater importance in terms of C cycling and delivery to the ocean but are also a lot more vulnerable to change (whether it is to be enhanced or inhibited due to thaw). Perhaps this sort of rationale is missing. For example, something along the lines of the first sentences in sections 4.4 would be great to include in the introduction prior to the objectives paragraph.

There some citations that are not in the References section, they were probably removed during the editing process. For example, Couture et al., 2018; Couture & Pollard, 2017, Dunton et al., 2006 are missing.

Lines 160 – The phrase “Under current, warming, climate conditions” perhaps there are too many commas?

Line 365 – 47mm is mentioned twice, maybe just needs to be mentioned once?