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Discussions

Interactive comment on "Deriving a country-wide soils dataset from the Soil Landscapes of Canada (SLC) database for use in Soil and Water Assessment Tool (SWAT) Simulations" *by* M. R. C. Cordeiro et al.

M. Asadzadeh

masoud.asadzadeh@umanitoba.ca

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The manuscript explains a great deal of effort that is spent to prepare SWAT-ready soil database in Canada. SWAT is a well-developed hydrological model capable of simulating management activities in agricultural lands and therefore is a very useful tool for analyzing land-use change scenarios. In fact, personally, I prepared a similar dataset for Southern Ontario; therefore, I know the value of the dataset in the larger scale, Canada-wide. Hence, I support the study and the dataset. I have two main comments that can help improve the usefulness of the dataset and the coherence of

the manuscript:

1. The study lacks a comparison between the proposed soil dataset for Canada and the SWAT database for US across the border. Such a comparison will make users aware of the discrepancy between the two datasets and give them a source of reference when modelling bi-national watersheds. Moreover, authors need to discuss the reason for the discrepancy between the two datasets across the border.

2. Authors need to discuss the uncertainty in the SWAT model structure for bi-national watersheds that use US soil dataset for the US side and the proposed soil dataset for the Canadian side of the watershed.

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