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Earth Surface Dynamics Discussions

Interactive comment on "Links between Baltic Sea submarine terraces and groundwater sapping" *by* Martin Jakobsson et al.

Martin Jakobsson et al.

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We thank Referee #1 for constructive and positive comments. The comments and questions raised have been addressed in a revised version of the paper. First, we agree that "sapping" can be a bit problematic to use, even if it commonly occurs in the literature. We therefore follow the recommendation and change the term to "seepage/seeping", also in the title. We agree that the time aspects of the formations indeed are very interesting, however since there are no direct age data available, we do not want to speculate too much. But we have followed the recommendation and included a couple of sentences that raises this topic following the age discussion on the glacial clay deposition on page 11:

"....The Baltic Sea basin was completely ice free at about 10 ka BP (Hughes et al., 2016). As the ice retreated (Stroeven et al., 2016), conditions may have developed for terrace formation at different places around the Baltic Sea depending on local sea level in relation to glacial clay deposits. The mapped terraces in the different regions may therefore be of different ages, some may be inactive while others are active today."

Detailed comments: 1: "Stabile" changed to "stable" in page 6. 2: Statistics of terraces in the Askö area. It was double checked, and come out to median/mean 15/16 m as written in the paper. Referee #1 is correct, it is simply because there are few in the shallower depths, which drives the statistics towards the deeper end. 3: We see the point and have included an additional reference to Stroeven et al. (2016, Deglaciation of Fennoscandia) for the sentence stating how the ice Scandinavian ice sheet retreated over the Baltic basin. 4: Our mistake, should not be "or older"

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