

Interactive comment on “Brief communication: Historical glacier length changes in West Greenland” by P. W. Leclercq et al.

Anonymous Referee #2

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General comment:

This brief communication presents length fluctuations since the 19th century for glaciers in the western and southern Greenland. New data from the second half of the 20th century, computed using aerial photographs and satellites images allow the authors to extend the records previously presented by Weidick in 1968. This updating is interesting as it allows to put in perspective the current changes with the trend at the pluri-decadal/centennial scale, and confirms that the first part of the 20th century experimented the most important retreat rate in this region of the world.

The paper is clear and well written and deserves to be published. I just have some minors comments that will help to clarify few points.

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Specific comments:

P. 3493, L. 14-15: Add a reference at the end of the sentence.

P. 3493, L. 17-21: If the mentioned points are the reasons why only 18 glaciers (within the 80 studied by Weidick (1968)) were considered in the present study, it has to be specified. If not, what are the reasons for not studying more glaciers of the Weidick sample?

P. 3494, L. 1: If the reference Paul et al., 2012, is still under revision, it has to be removed. If this paper is accepted, do not forget to update the reference.

P. 3494, L. 21-25: In this sentence, the part “which were not included in Weidick (1968),” can be removed. It is obvious that all the reference quoted in this sentence could not appear in Weidick 1968 because they are all more recent. Also, this sentence should be re-written in a sake of clarity.

P. 3496, L. 8: According to your interpolation used in Fig. 2a, the glacier #12 (Saarloq) also presents an important length change during the 2nd half of the 19th century, so that Assakaat is not the only one. Please clarify.

Figure 1a: You should named the three regions of interest (those cited P. 3493, L. 11-13), or at least put some coordinate marks on the map.

Interactive comment on The Cryosphere Discuss., 6, 3491, 2012.

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