

Interactive comment on “Brief Communication: 2014 velocity and flux for five major Greenland outlet glaciers using ImGRAFT and Landsat-8” by A. Messerli et al.

Anonymous Referee #1

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I don't understand what the purpose of this paper is. It seems partly to introduce new software (ImGRAFT), but this has already been done in Messerli and Grinsted (2014). Optical feature tracking is a well developed technique and is often used for this application, so there's absolutely nothing novel about the methods. Therefore, we are left with the results. These are velocity and flux measurements for five well-studied outlet glaciers with already published velocity and flux records extending to 2012 and 2013. Besides confirming an incomplete list of the literature, the single new observation is the Jakobshavn Isbrae was 7% faster in 2014 than 2012. From my understanding of TC's novelty criteria, nothing in this paper justifies publication.

Beyond that, the descriptions of the methodology are incomplete and hard to follow.
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The details of the software are left to the citation. The "scheme" for "filling in" missing data to arrive at a seasonal bias estimate is completely indecipherable to me. The flux estimates are provided without error bars.

I realize the point of the y-axis scaling in Figure 2 is to make it uniform between plots, but it makes variability and data quality on P & N impossible to assess.

Interactive comment on The Cryosphere Discuss., 8, 6235, 2014.