Interactive comment on “Brief communication “The aerophotogrammetric map of Greenland ice masses”” by M. Citterio and A. P. Ahlstrøm

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Authors reply to comments by Anonymous Referee #2

We thank the Reviewer for pointing out the essential point of the dataset availability, and for suggesting improvements to the figures and their captions. Unless noted below, we added all details and clarifications asked, and included the changes suggested by the reviewer.

Reviewer: The main issue with the paper is it’s unclear exactly how the margins were mapped: manually? brightness threshold? This needs to be explained more clearly.

The ice margins were mapped manually using the conventional stereophotogrammetric method. The operator visually recognizes and outlines the landscape features aided by the 3D visual stereographic effect from the aerial photographs and the high-detail photographic image of the land surface. We did not add further details to the text because this is a very standard technique and none of the other two referees asked for more details.

Reviewer: Another issue is availability of the data itself. Is this data available? It seems strange to have a paper presenting a private data set.

Added sentence to clarify that the dataset will be delivered to the GLIMS database for public redistribution.

Reviewer: Some examples, in another figure or incorporated into Figure 2, of the aerial imagery used would be helpful.

We added to Fig. 2a (Fig. 3a in the revised manuscript) an inset showing a detail of the terminus of one of the glaciers with the vectors overlaid on an orthophoto. The target shown in Fig. 2b (Fig. 3b in the revised manuscript) is too large for the high resolution aerial photograph to be included in any useful way.

Reviewer: In figure 1 it’s not clear what we’re looking - what is this a map of?

Caption now explains that the map shows glacier outlines from the PROMICE map, colour coded according to the source datasets used.

Interactive comment on The Cryosphere Discuss., 6, 3891, 2012.