**Interactive comment on** “Elevation and elevation change of Greenland and Antarctica derived from CryoSat-2” *by V. Helm et al.*

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R: More detailed description of retracking and SIN processing.
A: We included some more specific description in A1 and A2 explaining the processing.
R: Details to slope correction and convergence of iteration
A: Details to slope correction added in the method section 2.3 A: Figure 3 added to show the convergence
R: Show residuals of DEM – ICESat and include expected error to Figure 6 as a check on its own validity
A: Residual Map was not added. We can provide this but we already have 20 Figures.

We think the convergence is nicely shown in Fig.
A: Expected error as self validation is now included in Figure 9 as orange line
R: Reference to Khan paper A: Already in the text
R: Mass anomaly section insufficient A: Did the reviewer receive an older version? In the discussion paper we only describe volume changes and no mass changes.
R: DEM uncertainty hard to follow A: Changed and extended explanation in A3
R: dh/dt error equation wrong and two missing terms A: Equation has been corrected and extended. Du to the change of the dh/dt processing a second method is introduced in A4.
R: Errors maybe too small since they are likely influenced by significant correlated errors. A: We assume uncorrelated errors. As comparison we introduced a second methodology, which give similar uncertainties.

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Interactive comment on The Cryosphere Discuss., 8, 1673, 2014.