Summary
Thank you to the editor and anonymous reviewers. Your feedback throughout the review process has allowed us to improve the manuscript. With this revision, we submit the final technical corrections and provide responses to the reviewer comments below.

Report #1
Thanks to the authors for addressing the comments, the manuscript has much improved! And I think it is a great contribution to TC. I have only two comments left:

(1) Line 105: You mention that you subtract firn thickness changes from the surface elevation changes to obtain the dynamic thickness changes. But should not also a change in surface mass balance be accounted for? I thought that this is done by using RACMOv2.3p2 model results for the period from 207 to 2015

[Author response] To make it clearer that we account for both SMB and firn density changes, we have added this clause to the end of the sentence on line 105: "… which simulates thickness changes due to SMB."

(2) One question that seems a bit obvious: why you did not test combining the three types of observations for calibration?

[Author response] This was suggested in a previous revision, and we agree that the next logical step is to try to combine all three observation types into one calibration. However, in order to combine the three observations into one calibration, there are certain challenges that need to be addressed. The primary challenge is the need to better estimate the structural uncertainties in both the model and observations. This needs to be done consistently across all three observations observations used in a multi-variate calibration. In a previous revision, we addressed a reviewer comment on this same topic by adding discussion text to address the challenges that remain and the path forward.

Report #2
Remark on Figure 1:

Thanks you for adapting the figure and showing the aggregated mass change (uncertainty). I still find the figure caption not logically structured, please describe chronological panel a), b), c), d) e) and f).

[Author response] We have adjusted the caption for Figure 1 to introduce each of the panels in an alphabetical order: a), b), c), d), e), and f).