Interactive comment on “Global glacier retreat: a revised assessment of committed mass losses and sampling uncertainties” by S. H. Mernild et al.

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Mernild et al (2013) provide a utilitarian approach to assessing global alpine glacier mass balance. The WGMS has generated plots of AAR versus mass balance for many glaciers in the Glacier Mass Balance Bulletin series that indicates the utility of AAR for mass balance assessment. Currently the ubiquity of satellite imagery will allow for AAR determination on most glaciers. The advantage of AAR over ELA is that the ELA is hard to assess on many smaller alpine glaciers and is a less universal number. The AAR method also allows assessment for individual glaciers that GRACE does not. ICESat will likely not be as useful for annual mass balance assessment when it comes online. The title uses the word Global glacier retreat, but retreat is not the key parameter, mass balance or volume is and key input is AAR, both mass balance and AAR should be it
Figure 5: Better illustrate the firn, bare ice and retained snowpack.

Figure 6: Does not exist yet. It would be useful to provide a good example of a larger glacier too just like in Figure 5, such as Lemon Creek Glacier, AK or Wolverine Glacier, AK, side by side with satellite image of AAR on the same glacier.

Supplement-data file: Why does the data table contain glaciers that are not used, why not remove these?


