

The authors have done a very nice job of addressing my previous revision. I still have a few very minor comments, but otherwise I feel that this paper is ready for publication.

L67: Figure 1a refers to a temperature change as Δt and not T' . I think they are referring to the same thing?

L75: Does the absolute value sign have some meaning? Isn't $L' - L'_{eq}$ greater than or equal to 0 when you are talking about committed retreat? Or is that $|L' - L'_{eq}|$ is the disequilibrium, which just happens to be positive when a glacier is retreating?

L78: “matches” or “approximately matches”? Is this referring to line 110?

L87 and elsewhere: I am still unsure about the use of the terms PDF and CDF for the plots that you've generated. (I'm not an expert in probability and statistics, so I could be wrong about this. If so, my apologies!) My understanding is that when you integrate a PDF from x_1 to x_2 , you get the probability that a randomly selected sample will fall between those two points. Let's say you have a bin that goes from 0 to 100 and has a value of 0.001. If you integrated from 0 to 50, you would find that the probability of a random sample falling between those two numbers is $50 \times 0.001 = 0.05$. Similarly, if you integrated from 50 to 100, you would also find that the probability of a random sample falling between those two numbers is 0.05. So essentially you are saying that the probability doesn't change within a bin, but then undergoes a step change at the edge of the bin, which seems strange. This is why I suggested using empirical CDFs and CCDFs, which don't have that issue. Maybe the graphs should be referred to as histograms or binned PDFs? Regardless, any changes you make here wouldn't affect the outcome of the paper.

L104: Is this necessarily a step-change, or just a change from one steady-state climate to another?

L151: Is it possible to say in a half-sentence or so why your model doesn't work for small glaciers? Is this essentially referencing Fig. C1?

L172-174: In my initial review I had a comment about not fully understanding the area weighting. I think it makes sense now. When discussing response times, for example, I think the area weighting essentially tells you the response time for a randomly selected area of glacier ice. Since you are more likely to select a random area from a large glacier, that will shift the PDF and CDF to the right. Perhaps it would be worth adding a sentence to this effect?

L289: Isn't $\dot{b}_t$ the only other thing affecting τ ?

L384: Should this be “We consider this to be a reasonable estimate”?

Fig. 9: Have you tried including the uncertainty in τ in the plot? I wonder if it would be easier to understand the uncertainty if there were shaded regions.

L387: “we assess”