## Author response to editor comments

To the authors,

You have done a good job addressing the comments of the reviewers and I find the manuscript to be near ready for publication. I only provide some minor specific suggestions below.

Best regards, Alex

Thank you for your suggestions. We have incorporated all of them in the latest version, as you will see in the accompanying track changes file.

Specific comments:

L12: all our  $\Rightarrow$  all of our

Figure 1: Consider using a color-blind friendly palette, or at least one with more subdued colors.

The previous version did appear to be colour-blind friendly when tested, but the subdued colours look a lot better either way! Thank you for this suggestion, which has greatly improved figure 1.

Eqs. 3 & 4: As a minor recommendation, consider reformatting to make Eqs. 2, 3 & 4 easily comparable. This could be done by giving all three equations a format like:  $\tau = X * v/|v|$ , where X is the term that is different in each case.

L159: Each simulation is run for 20 years => After optimizing, the sliding parameters are fixed and each simulation is additionally run for 20 years

L161: influence the  $\Rightarrow$  influence on the

L167: Please reiterate here which value of M\_max is used for clarity.

M\_max is in fact not used at all in this case, an important clarification to add.

L253: "higher values of m respond". <= please rephrase slightly as the values of m do not respond.

Figs. 7 & 8, captions: The contributions of each region => The contributions of the whole domain as well as of each region

L309: Kohler Glaciers, the same locations => Kohler Glaciers - the same locations