

Dear Dr Jim Freer

Thank you for working with us through our submission of our manuscript. We have added this text regarding the pixel-to-pixel variations. Unfortunately, we do not have a solid solution yet, but the issue is being investigated further.

“We need to note that Figures 11 and 13 show pixel-to-pixel variations in the Crocus output. This is not due to variations of atmospheric forcing (which has a 1 km grid spacing compared the 100 m grid spacing of the WRF-Hydro/Glacier simulations) or blowing snow. We suspect the pixel-to-pixel variations arise from small vertical resizing errors of the very thick glacier layers, for where we relaxed some of the test requirements when resizing. This does not change the conclusions in this paper, and work is in progress to address this issue. “