

Interactive comment on “Quantifying the contribution of glacier runoff to streamflow in the upper Columbia River basin, Canada” by G. Jost et al.

Anonymous Referee #3

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(I'm one of the other referees). I'm persuaded by major Major Issue (1): this paper would be very much strengthened by an analysis of the effect on the model of using non-varying glacier extents, which would serve to illustrate (quantitatively) the benefits of using varying glacier extents. The conceptual benefits are clear, but in a basin with only 5% glacier cover, does these benefits actually translate into significant prediction improvements? With a potential monthly streamflow contribution of up to 35%, I'd be surprised if there wasn't any improvement using varying glacier extents, but this ought to be demonstrated - so as a referee, I'd very much like to see this included as a revision point. It will naturally require some re-analysis, but the paper will be improved

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significantly.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 4979, 2011.