

1. Most of the equations that are presented in the manuscript need to be rewritten. For example, eq. 3 should be written using a summation notation (see the attached file). The subscripts are confusing (compare eq. 2 and eq. 3). To reflect the band of interest and the grid of interest, the dependent variable should have two subscripts (i.e., i and j).

**Reply:**

Thanks for the comments. We have rewritten the equations in the revision.

The unit of the dependent variable in eq.2 is incorrect. Is it mm/day or mm?

**Reply:**

It is mm/day. We have corrected it in the revision.

The definition of “f” in eq.2 is incorrect. Are you referring to the proportion of glacier area in a particular grid whose total runoff is being calculated?

**Reply:**

f is the percentage of glacier area in each grid.

The variables in eq.4 need units to understand your calculations.

**Reply:**

$$V = 0.04S^{1.35}$$

Where, V is glacier volume (km<sup>3</sup>) and S is glacier area (km<sup>2</sup>).