Reviewer #1

Thank you for completing a second, detailed review of this paper.

1. We corrected Equation 1 as suggested. Thank you. We also corrected mb to Pa in one place in the paper. However, we struggled to see where SWE was in inches, or elevation was in feet in the paper (other than Equation 1).
2. We corrected m^3/s to m^3s^{-1}. I also changed all other slashes in units to $^{-1}$.
3. We calibrated the model in the CHPS software, which generates monthly statistics. We validated the model using monthly statistics as well. Thus, values we report in the paper are from aggregated monthly model results. We have added this to the paragraph and the figures.

Specific Comments
1. We replaced mb with hPa.
2. We added the units for snow density.
3. We replaced northern with north.
4. We changed data has to data have.
5. This was an oversight, the results are reported in mm, not inches. We correct the paper. Thank you for noting this.
6. We changed to sub-basin to sub-basin.
7. We fixed this issue.
8. We changed this to while they perform.
9. We changed this to "results shown in Figure 3 illustrate"
10. We corrected this problem.
11. We changed this as suggested.
12. We moved the reference to the correct place.
13. We abbreviated the journal name.
14. We corrected this.
15. We abbreviated the name.
16. We added the space.
17. We corrected this.
18. In the Table 4 caption we note the monthly time frequency. For R values, we italicized statistically significant values and added a sentence to the caption explaining this.
19. We added in monthly to the Figure caption.
20. For Figure 9, we changed the length of x-axes to better match the y-axis length for improved day-to-day variations in the simulated discharge for the six study basins. We also changed the results to specific discharge as suggested to allow easier comparisons between the basins of different areas.
21. We made these changes to the supplemental.

Reviewer #2
P2L9 change "aerial depletion curve-derived extent of snow cover" to "extent of snow cover derived by aerial depletion curves"
We made this correction.

P2L17 "is of value --> "valuable "
We have changed this to valuable.

P2L22 consider using another word for "tuned"
We replaced tuned with corrected.

P6L6 nearest neighbor – no capitals
We changed this to lower case.

P6L24-L29 equation 1 (not 2);please refer to the equation and do not embed it in the sentence. For instance like this: delete "The standard division by viewable gap fraction," SCA_{adj} (henceforth referred to simply as fSCA) is the fSCA adjusted for canopy cover (Equation 1). where Fveg is the tree cover percentage and SCAf is the unadjusted SCA data.
We have added in a reference and moved the sentence to above the equation.

P7L16/17 write "…as a coefficient, C (equation2)."
We have changed this as suggested.

P7L21 consider renaming "elev" to avoid confusion with "ELEV" from the SNOW17 model
We have changed this to *elevation*.

P8L6 6°/100m (not 1000!)
We believe this is correct as 6°C per 1000 m.

P8L14 hrs -->hr
We corrected this.

P14L5 delete "shown in Figure3" add (Figure 3) at the end of the sentence
We have changed this as suggested.

P14L12-14 This sentence appears to be incomplete please revise; delete "shown in"
We have revised the sentence, and we hope it reads more cleanly.

P16L21 delete "but not all"
We have deleted this part of the sentence.

P16L26 delete "or improved"
We deleted improved.

P16L30 interior
We have went through all instances of interior or Interior (Alaska) in the ms and cleaned this up.

P16L35 change "shown in the Liu study" to "in Liu et al. (2013)

We changed this as suggested.

P17L3 "is of value --> "valuable "
We changed this as suggested.

P18L6/7 Delete as shown in Figure 4, add (Figure4) at the end of the sentence
We rearranged this as suggested.

P18L32 Delete "system
We deleted system.

P19L6 Change "it" to "is"; break sentence in two
We made these changes as suggested.

P19L29 these references should have been used already in the introduction part (and maybe also only there)
We removed these references.

Table1: Please change the unit of Q to m3/s.
The caption does not read really consistent. Consider this proposal:
"Sub-basin characteristics, including name, sub-basin ID, area, elevation mean (range), average monthly temperature, T, for January (July), average seasonal total precipitation for winter (November-February) (spring (March-June)), annual average daily discharge Q, slope basin units (lower, N=north and S=south), land cover (based on majority cover values*). T, P, and Q calculated from the 2000-2010 water years."
We adjusted the caption as suggested, with a minor difference in the above suggested text.

Table 3: Please, check the values in cell SCF/Max there appear 3 values overprinted.
Is the unit of DYGM not per time since it is a rate?
We adjusted the description of DAYGM. We don't see any overprinting in our Word version, so we will assume this is a PDF conversion issue that will be cleared up in final print stages. We also adjusted the caption of the table to read "Minimum (Min) and maximum (Max) parameter values used in the model simulations. When min and max values are the same the parameter did not vary."

Table 4: Delete "(Per., 1999-2010)" in conflict with last sentence of the caption.
We left this the same, but changed the last sentence as follows "Note that the calibration and validation years are not the same for all catchments." as the period of record is the same but the calibration and validation years are not.

Table5: Add "upper (U)" to explain the "U" in the table; Change bolded to bold
We made this change to the table.

Figure 4: p5L24 open bracket before "blue"
We made this change. Thank you.