

Herbert et al. – Review #2

Wyatt Reis

I appreciate the effort the authors have put into addressing my first round of comments. I feel that they have adequately addressed those comments and the changes have improved the manuscript. Here I have identified a few minor comments that should be addressed prior to publishing.

Section 2.1.4 – Would it make more sense for this section to fall under section 2.2 since this section describes an analysis method not the source of data?

Figure 3 – I recommend writing out the full caption of the figure instead of relying on the Figure 2 caption. This will cause the figure captions to be repetitive, but it would be a more thorough solution. Another solution could be to combine these figures and make them an eight-panel plot. This would reduce the amount of text while still allowing the key takeaways from the figures to remain.

Section 2.2.4 – Would it make more sense for this section to be a sub section of Section 2.2.2? Jumping from RSD in Section 2.2.2 to Landcover and topography (Section 2.2.3), then back to RSD (Section 2.2.4) is jarring for the reader. The same is true for the results section.

Line 266 – Is “Lidar” referring to the 50 m SD?

Line 270-273 – Here and elsewhere (Line 371-374 is another example) are sections of text in the results that read more like interpretation and would be better suited for the discussion. I recommend the authors move portions of interpretive text from the results to the discussion.

Figure 4 – This caption could be revised to improve the readability. Could rewrite to "Histogram plot of the 5-95th percentile Lidar snow depth values around snow stations in (a) Colorado (138 sites) and (f) California (338 sites). Cumulative density function plots at select sites in (b-e) Colorado and (g-j) California spanning low to high snow depth variability..."

Line 291 – Could remove “(described in Section 2.2.2).” With the improved structure of the paper, you have implemented the reader can easily find the appropriate methods section.

Section 3.3 – Most other section headers only capitalize the first word. Make consistent.

Section 3.5 – Update all figure references to Figure 10.