

Interactive comment on “3D surface properties of glacier penitentes over an ablation season, measured using a Microsoft Xbox Kinect” by L. I. Nicholson et al.

Anonymous Referee #2

Received and published: 29 February 2016

Recommendation: This paper is suitable for publication after minor revisions.

line 57. Drewry 1970 is missing from the reference list.

line 74. Change Carol to Carroll.

line 80. Fassnacht et al 2009. Do you mean 2009a or 2009b?

line 85. Change “surface” to “survey”.

line 100. Fassnacht et al 2010 is not in the reference list.

line 104-105. Change “Mankoff et al.” to “Mankoff and Russo”. Also on lines 165 and 455.

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lines 107-109. This sentence will be easier to read if written with parallel construction. Change to “(i) to perform the first . . . (ii) to perform an examination . . . (iii) to compare the volume . . .”

line 114. Change “mas” to “mass”

line 121. Change “Figure 1b” to “Figure 1”

line 267. Change Brutseart to Brutsaert.

line 357. “strong east-west preferential orientation”. But Figures 4e and 4f show aspect orientation north-south, not east-west. You need to define “aspect”.

line 382. Change Lettaus to Lettau’s

line 401. “at site A”. Figure 8 caption mentions only site B, not site A.

line 409. “predominantly from the south-westerly sector”. On Figure 9 the wind direction is predominantly SE not SW.

lines 522-525. This is an important result; it should be included in the abstract.

line 674. Breidamerkurjökull. (change h to k)

line 682. Change “roughness of” to “roughness on”

Table 2. Units of windspeed should be m/s. So change the exponent from -2 to -1.

Table 3. This table is not referenced in the text.

Figure 1. What are the units of the tick labels? They should be replaced with latitude and longitude, or else removed.

Figure 2. The labels on the color scale will be easier to read if given in mm instead of m. Then (for example) “0.0000” becomes “0” and “0.0500” becomes “50”.

Figure 3 (a,b). Why are the heights negative?

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Figure 8. What do the colors mean? What does it mean that the green values are positive but the blue values are at -1m?

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