The Cryosphere Discussions

The Cryosphere Discuss., community comment CC2
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Comment on tc-2020-378

Ute Herzfeld

Community comment on "Mapping the aerodynamic roughness of the Greenland Ice Sheet surface using ICESat-2: evaluation over the K-transect" by Maurice van Tiggelen et al., The Cryosphere Discuss., https://doi.org/10.5194/tc-2020-378-CC2, 2021

In the introduction, you provide references ot previous work on surface roughness and its relationship to atmospheric processes in the boundary layer.

In the 1990s, we have conducted measurements of surface roughness on the Greenland ice sheet and written a fundamental paper on the relationship of surface roughness and melt energy, which was discussed with the last author in person - and with the first author sometime later via email.

Here is the reference:

HERZFELD, U.C., J.E. BOX, K. STEFFEN, H. MAYER, N.~CAINE (2003/2004, printed 2006), and
M.V.~LOSLEBEN, A case study on the influence of snow and ice surface roughness on melt energy, Zeitschrift f"ur Gletscherkunde und Glazialgeologie, v. 39, p.~1-42

It would be good to see our work given due credit in this paper.

Next, I'm reading the drag context with interest.

Best regards, Ute Herzfeld and coauthors