

Reviewer: Stephen Palm

Review of:

## Drifting snow statistics from multiple-year autonomous measurements in Adelie Land, eastern Antarctica

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This paper presents high temporal resolution measurements of drifting and blowing snow from two surface stations in Adelie Land for a 3 and 9 year period. Such measurements are important for understanding the frequency and intensity of drifting and blowing snow and its effect on ice sheet mass balance. Given the paucity of these observations, this work is important and should be published after addressing the minor comments below.

Line 20: Please cite Palm et al., 2018 as this paper was the first to estimate the mass of snow being exported off the Antarctic continent.

Line 41: Change “relatively” to “relative”

Line 42-43: You should change this to at the present time the layer are restricted to 30 m deep, but ICESat-2 will be able to get layers less than 10 m deep. I'm working on that... Or maybe just begin sentence "Moreover, prior satellite detection has been restricted"

Table 1: Indicate relative humidity is respect to ice (or water).

Line 121: Not the right word. Maybe say "This provides evidence that..."

Line 147: Delete the work “occurrences”

Line 168: along is not the right word. "during" is better

Line 176: Change “underestimates” to “underestimate”

Line 177: Change “relatively” to “relative”

Line 180: Change “reached the ground yet is” to “yet reached the ground”

Line 239: Change “evidences” to “demonstrates”

Line 244: Change “evidences” to “shows”

Line 297: “drifting snow events” Shouldn't you say here "significant drifting snow events" since you have filtered them by this criteria?

Line 397: Change “evidence” to “show”

Lines 399-401: I do not understand what you are trying to say here. I suppose it is in reference to satellite lidar's poor spatial sampling and that it cannot sample the same region very frequently. I suggest changing this sentence to:

The poor spatial and temporal coverage of satellite lidar techniques render it difficult to determine the mean duration of snow-transport events such as those reported here. However, blowing snow events covering large areas can be successfully detected and tracked over a period of days as demonstrated in Palm et al, 2011.