Hi Sandra and co-authors, please consider the few remaining problems here below:

Comment 9: We agree that for these calculations, cases of dry and flooded snow need to be distinguished. We therefore add a second equation, taking also the latter case into account:

As soon as F gets negative, a flooding of the snow/ice interface is assumed, and with that the formation of snow ice. As the latter is assumed to have the same density as sea ice (Knight, 1988), freeboard is calculated for the flooded case as

$$-F = S - \frac{I + S - P\left(\frac{\rho_P - \rho_W}{\rho_W - \rho_I}\right)}{1 + \frac{\rho_S}{\rho_W - \rho_I}}$$

Not yet there, I believe…

a) I am not sure that, at this period of the year, flooded snow automatically turns into snow ice
b) If it is the case though, automatically the freeboard should be zero! I would have thought you would have considered "wet snow" (similar to loose platelet, in a way, but with different density depending on porosity).. floating snow, so to say…
c) I must admit I don't see how you reach that equation 1.2?...Please provide development, supposing you find it still valid, given b)…Also, in that case, what do you use for S: the thickness of observed dry snow?...
d) Have you taken the potential changes for negative freeboard into account in your figure 5?
e) Maybe we are "cutting hair in four", and that would not make any significant difference in the end(?)… but it does make a difference in your comparison to measurements, obviously with your equation 1.2 (?) … you just need to be clear in the manuscript…(and in my mind :0))

Comment 11: We rephrased the sentence towards:

Colors indicate the relative frequency of each shown wind direction to wind speed pair.

I still have problem with that figure 3. To me it shows the range of wind velocities from various directions. It does not show "prevalence" of directions with regards to each others, is it?..., which is the main use you are making of it in the text, correct?.. and what is the use of that relative frequency (always extremely low %!) not used at all in the text, I believe..

Comment 12: Due to the adjusted calculation, the average value between measured and calculated freeboard values is "negative" zero (-0,0045 m). The new statistics add up to:

According to Equation 1.1, 66% of the calculated freeboard values are smaller than the measured values. The difference between measured and calculated freeboard values ranges from -0.54 to 1.11 m with an average of 0.00 ± 0.19 m. Neglecting the underlying buoyant platelet layer in the calculation reduces the freeboard by 0.07 ± 0.15 m, whereas neglecting the snow layer on top of the sea ice increases the freeboard by 0.19 ± 0.29 m (Figure 5).

So using your equation 1.2 changes things in the comparison to measurements… with now a "nul" average difference :0) …question is, is equation 1.2 valid?.. Also, how come these number change, and not the estimates neglecting either platelet or snow?...they should have changed too, since the calculation has changed? I must admit I am lost!..

Comment 14: The decreasing snow depth towards the ice shelf might be related to both, the easterly winds and the edge effect as shown in the Discussions.

I know, but what I am saying is that the "eastern edge" is not different from the "western edge" if we look at the figures.. both edges show a decreasing snow thickness.. so you cannot say what you say there..