Ocean Science
Discussions

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Interactive comment on "Storm-induced water dynamics and thermohaline structure at the tidewater Flade Isblink Glacier outlet to the Wandel Sea (NE Greenland)" *by* Sergei Kirillov et al.

Anonymous Referee #1

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I'll keep it short: this paper is pretty good, and the results are exciting. The manuscript shows that the water masses interacting with a tidewater glacier can be affected by storm events despite fast ice cover. It highlights that tides and storms can induce circulation in the vicinity of supposedly sheltered glaciers, which has dramatic implications for the future of these floating glaciers.

The science is rigorous, and since it is based on in-situ measurements I cannot require more data. There is however one thing that is missing: the explanations as to why you do each calculations that are demonstrated. Try and justify what you are doing, and link each paragraph and section a bit more together. As it is now, the paper is quite

dry and sometimes hard to follow. Help the reader understand where you are leading them.

Also, five minor comments:

- line 129 (p5): halostad? This is the first time I see this term.

- line 220 (p7): why is there no basal melting? The intrusions sound less problematic then.

- Figure 4, lower panels: have vertical lines over it to indicate the days, or at least the red and blue boxes of episodes A and B.

- Figure 6: in the caption, the distinction between what is measured from PS and from ITPs is unclear - everything looks like grey curves to me. Choose different symbols or a different wording.

- Figure 7: ylabel of the insets is missing

I consider that all these suggestions are easy to address and hence recommend that this article is accepted once my comments have been addressed.