

# Response to Editor: Automated detection and analysis of surface calving waves with a terrestrial radar interferometer at the front of Equip Sermia, Greenland

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Line 102: should be "We determined that 5 out of 17..." **We modified accordingly.**

Line 157 :areas close to the water surface, and that independently of the ice cover in the fjord (Figs. 1 and 5a) **We clarified this sentence by modifying the second part of the sentence for "whether the fjord is ice covered or not".**

163: " On the averaged, as well as on consecutive images, " I think this needs to be "on the averaged image" **We modified for "On the hourly averaged images".**

186: I didn't understand the error bars on the temporally cumulated WPI in figure 6. Please explain how the error bars were calculated, and how the significance of the differences was calculated. **The bars correspond to the standard deviation for the dataset of each sector. We obtained temporally cumulated WPIs along the calving front, and then averaged them (and computed the standard deviation) per sector. They are therefore variability bars more than error/uncertainty bars, which is why we simply called them "bars". We therefore modified "average values" for "sector-averaged values" and "standard deviations" for "the associated standard deviations for each sector".**

**The significance of the differences is presented at L186-187: "All the differences presented above have been determined to be statistically significant using a t-test yielding p-values below 0.001 and t-statistics from 3.4 to 21.1."**

214: "These results are associated with a better range coverage" – the meaning of range coverage is not clear. A few more words explaining it would help. **The goal was to note that these results are associated with a more homogeneous data coverage compared to the maximum wave height, with more values in the high range. But after discussion, we think this pattern is only very minor, and therefore this sentence is misleading for the reader. In this way, we decided to delete this sentence.**