Responses to the Topic Editor

**Topic Editor Decision: Publish subject to technical corrections** (11 Aug 2020) by Joanne Williams

Comments to the Author:
Thank-you for the revised manuscript. I think it is nearly there, but there are still a few remaining corrections that have not been addressed.

Table 1: sea-state bias not biais!

Corrected

line 246 and elsewhere "Figure 4 shows". See https://www.ocean-science.net/for_authors/manuscript_preparation.html.

*Not clear what is meant here. Figure captions modified according to authors guidelines*

Thank-you for the improvements to the text in section 6.1. I now understand your argument about the ssb correction. Figure 16b still requires improvement. The orange/red curves need to be rescaled to a similar scale to SWH, in order that correlation with the SWH is readily visible. Otherwise you might as well omit it and just quote the correlations, as on the scale provided it shows very little.

*We have removed Fig.16b (almost all co authors are on vacation, including the first author Yvan Gouzenes who prepared the figures. Thus no possibility to redraw it within the requested deadline).*

Correlations have been quoted in the text.

Line 574 is not at all clear. 24 km in which direction? Why not just provide a lon/lat? Or as previously suggested, indicate on one of the maps (Fig 18 is probably best). Given the variability in Fig 18, this is relevant.

*The coordinates of the grid cell center have been added in the text.*

Please also indicate 15km along-track distance on Fig 18. It would be very helpful for interpreting this figure alongside the along-track plots. The reader can work it out with Google Maps, but shouldn't need to!

*The 15 km along-track distance has been indicated by the red bar across the Jason track.*

Please cite ERA5 reanalysis data as required by ECMWF: see https://confluence.ecmwf.int/display/CKB/ERA5%3A+data+documentation for details.

Please include both the tide gauges and altimetry data in the data availability section. Provide repository links, preferably with DOIs if possible.

*Done*

And there are still missing elements from https://www.ocean-science.net/for_authors/manuscript_preparation.html. For example, I notice there is no contribution of authors section. Please check this list again thoroughly.

*Added*