

The authors' revisions have greatly improved the quality of the manuscript. However, some elements of the manuscript still need to be clarified before publication. Most of them are very minors, I added a * in front of the ones that seem more important to me.

P1L1: *"Waves are known to decay exponentially..."*

It is often assumed that wave decay is exponential, but it is not found in all the observations of waves in ice (eg. Kohout et al., 2014). I would recommend to simply remove "exponentially" from the sentence.

P8L220 *"On the other hand"*

I am a bit confused by the use of "On the other hand" here. How does this sentence relate to the previous ones ? As I understand it, I would rather write something like "In existing parameterizations...".

P8L220 "Figure 2 shows" -> "Figure 2 also shows"

*P9L279 *"whereas the TodaiWW3-ArCS [...] Piper#13 location."*

I find this interesting, do the authors have an idea why this is the case?

P10L291 *"contours can be some 200km apart"*

It would be actually really nice to have some spatial scale in km on Figure 5 if possible.

P10L297 *"The above suggest [...] observations sites"*

I found the transition between section 4 and section 5 pretty confusing before reaching this paragraph, maybe consider putting it at the very beginning of section 5.

P13L386 *"For observational evidence [...] and selected 50cm."*

Using 50cm to study sensitivity of results to SIT makes sense to me, but I don't really understand this sentence. Ardhuin et al. (2018) do not use thickness observations, and investigate the sensitivity of their results to the constant thickness they provide by using SIT=15cm and SIT=30cm, not 50cm.

P13L396 Please mention that the results for the cases with scattering are not shown.

*P13L403 *"[...] models represent the exponential decay..."*

Here again I disagree with the fact that models in WW3 represent an exponential decay. This may be the case in the selection presented in this manuscript, but it is not the case in general. For instance, some of the processes introduced by Boutin et al. (2018) are non-linear.

P13L409 Please remind the reader what is s_{ice}

*P13L415 *"It is worthy [...] to be resolved"*.

Swells that are long enough to propagate far in the ice cover ($O(100\text{km})$) are likely to be unaffected by scattering. Scattering is only efficient for short waves ($< 10\text{s}$) when sea ice is made of consolidated floes.