

The paper “A year of transient tracers chlorofluorocarbons 12 and sulfur hexafluoride, noble gases helium and neon, and tritium in the Arctic Ocean from the MOSAiC expedition (2019-2020)” has been carefully revised by the authors and resulted in a great improvement of the manuscript. I would like to thank the authors for incorporating my previous comments into the new version, and acknowledging it. I would accept the manuscript as is, but here I wanted to give some last minor comments/thoughts, in case the authors want to consider them for the final version of the manuscript.

Technical/specific comments:

Line 70: Change transient time distribution to Transit Time Distribution (TTD).

Same Line 70: I would rephrase this sentence to “... by first computing the transit time distribution (TTD), which is a measure of the age spectrum of a water mass (Tanhua et al., 2009)”. Here it would maybe consider to refer to the papers from Waugh, Hall, etc.

Table 1 and Table 2 are very similar, but Table 2 has much less parameters than Table 1. Just in case the authors want to merge this two, they could mark the 10 parameters in Table 2 (e.g. with a \*) in Table 1. Alternatively, one could add an extra column in Table 1 indicating which datasets (i.e. ocean/snow) include each parameter.

Figure 7 has greatly improved with the addition of sampling years. However, for the CFC-12, I can't see any datapoint collected in 2015. Is there no CFC-12 data that was collected in 2015? There should be from PS94... but maybe there is a reason not to include them?

Figure 8f would benefit from also adding the year of PS100 in the legend, as 2016 would cover the gap between 2012 and the new data of MOSAiC (2019 - 2020). Is there no SF6 data from PS100? This would also be very valuable to have, as one could use the combination of CFC-12 and SF6 published in this work, to estimate the TTDs using the gas tracer-pair.