

Dear Jenny,

Thank you very much for your kind feedback and the suggestions! We have corrected the manuscript accordingly and done the proof reading.

Best regards!

Anton, Pierre, Leif, Roberto, Yufang, Georg, Thomas, Signe and Fanny

page 3, line 31: A suggestion to reword "The initial MYI concentrations are corrected by two correction schemes": Two correction schemes were applied to initial MYI concentration. This is a purely stylistic suggestion.

Reply: Corrected.

page 4, line 23: "Such case" -> "Such a case"

Reply: Corrected.

page 5, line 2: "details below" -> "detail below"

Reply: Corrected.

page 7, line 15: "increases risk to consider" -> "increases risk of considering".

Reply: Corrected.

page 7, line 16: "also" is not required in this sentence

Reply: Corrected.

page 10, line 2: "The developed advection scheme". Reference the section or paper where this is introduced.

Reply: Reference added.

page 10, line 12-13: "Finally, we have used the new advection scheme, the OSI SAF ice drift and fully accounting for SIC." Rephrase, this sentence does not make complete sense. Should the "and" be removed?

Reply: This sentence was rephrased the following way: *Finally, we have used the new advection scheme, the OSI SAF ice drift, and fully accounted for SIC.*

page 16, line 4: " allows to draw an outline". There are several examples of grammar mistakes like this throughout the paper. You could either phrase this as "allows one to draw an outline" or "allows drawing of an outline".

Reply: This sentence was rephrased the following way: ... *which allows one to draw an outline and compare it with outlines of MYI from the SICCI product as shown on*
Another occurrence was rephrased the following way: ... *this simplification allows us to initialize the sea ice age ...*

page 17, line 15-17: Consider rephrasing " Although it happens later - maybe after 5 years of propagation - but a higher number of initial points still leads to undersampling when the Lagrangian propagation" scheme is used." Perhaps "With a higher number of initial points, undersampling is still experienced after 5 years of Lagrangian propagation". Also, it would help to quantify what "higher number of points" is.

Reply: This sentence was rephrased the following way: *With a twice or four times higher number of initial points, undersampling is still experienced after 5 years of Lagrangian propagation.*