

# Southern Ocean polynyas in CMIP6 models

submitted to the Cryosphere by Martin Mohrmann et al.

I thank the authors for providing thorough and detailed responses to all my questions and for addressing all my major and minor comments. I find the revised manuscript ready for publication. Upon reading through the document with tracked changes, I just ran into a few typos and minor issues (listed below) that authors might want to consider.

## Minor or technical comments

- Table 1: I believe that the GFDL CM4 uses the AM4.0 atmospheric model. The manuscript has been corrected to show “GFDL-OM4.0”. OM4.0 refers to the ocean model. Please verify the information in Held et al. (2019). Same comment for the GFDL ESM4.

- l. 209: km should be km<sup>2</sup>.

- l. 366: km should be km<sup>2</sup>.

- Figure 5: The resolution of the figure is poor.

- l. 593: “polyny” → ”polynya“.

- l. 587: It is unclear to me what this factor is about. Also, there needs to be a ”a” before “factor”.

- Figure 10: In the caption, “ARGO” should be “Argo”. Panel m, legend: There should also be ENA4.