

A Review of the resubmitted Manuscript
“A comparison of the atmospheric response to the Weddell Sea
Polynya in AGCMs of varying resolutions.”

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I appreciate the authors' effort to address some of the issues mentioned in the earlier manuscript review. Most of the authors' rewriting efforts greatly help better understand the results and discussion section of the paper. However, that alone does not recommend publication, considering that, as the authors themselves state, "the results are somewhat expected." The authors have presented no new analysis other than what was in the original submission. The manuscript does not have enough analysis to present a well-rounded story that would do justice to the goal of the manuscript. The authors do not save any of the outputs related to cloud characteristics, which is strange considering they wanted to study the atmospheric response. Previous studies that look at the atmospheric response to a Weddell Sea Polynya have found that most of the atmospheric response is limited to the vicinity of the open ocean polynya in terms of cloud and precipitation changes. Thus, the authors would have wanted to save the atmospheric variables that quantify the cloud characteristics and analyze the difference in cloud and precipitation characteristics with changing resolution. Furthermore, it is justifiable that at least one of the simulations should have a higher spatial resolution of $\sim 0.1^\circ$.