

The Cryosphere Discuss., editor comment EC1
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Comment on tc-2021-120

Nicolas Jourdain (Editor)

Editor comment on "Quantifying the potential future contribution to global mean sea level from the Filchner–Ronne basin, Antarctica" by Emily A. Hill et al., The Cryosphere Discuss., <https://doi.org/10.5194/tc-2021-120-EC1>, 2021

Dear Emily Hill and coauthors,

I've received late external feedbacks on your paper. Please also provide responses to these four points:

- A single model realisation is used to create the 2300 projections. It would have been more rigorous to use several simulations, in order to test the extremes of plausible scenarios.
- A Latin hypercube is used to sample 500 parameter values. Why was 500 chosen as the design size ? Has anything been done to check the plausibility of the values or to sample extremes?
- Several parameters are given uniform priors without much reasoning. Why was uniform the best choice?
- The long tail for RCP8.5 contributions at 2300 is mentioned as being due to certain parameter combinations – what combinations? Are they plausible? That would tell a lot about how much attention should be paid to these upper values.