

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

Nicolas Jourdain (Editor)

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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

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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.